DIGITAL VIDEO SURVEILLANCE RECORDER

WITH PENTAPLEX OPERATION AND MPEG4 VIDEO COMPRESSION

INSTRUCTION MANUAL

English Version 1.0



MODELS:

DHU104 SERIES

DIGIMERGE

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Thank you for purchasing this Digital Video Surveillance Recorder. Digimerge is committed to providing our customers with a high quality, reliable security product.

The DHU104 Series combines advanced performance with easy operation and great economy to offer a whole new class of digital video recorders to 'high end' residential, commercial and industrial CCTV applications. The intuitive graphic user interface and mouse driven navigation make the DHU104 easy to program and easy to use. The unit is also network ready and comes complete with remote video management software and free DDNS support.

To learn more about this Digital Video Surveillance Recorder, and to learn about our complete range of accessory products, please visit our website at:

http://www.digimerge.com



CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK
DO NOT REMOVE COVER (OR BACK).
NO USER SERVICEABLE PARTS INSIDE.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

**WARNING: TO PREVENT FIRE OR SHOCK HAZARD,
DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.**

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

Please visit us on the web for the most current Manuals, Quick Start Guides and Firmware at:

www.digimerge.com

Important Safeguards

In addition to the careful attention devoted to quality standards in the manufacture process of your video product, safety is a major factor in the design of every instrument. However, safety is your responsibility too. This sheet lists important information that will help to assure your enjoyment and proper use of the video product and accessory equipment. Please read them carefully before operating and using your video product.

Installation

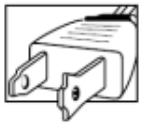
1. **Read and Follow Instructions -** All the safety and operating instructions should be read before the video product is operated. Follow all operating instructions.

2. **Retain Instructions -** The safety and operating instructions should be retained for future reference.

3. **Heed Warnings -** Comply with all warnings on the video product and in the operating instructions.

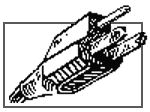
4. **Polarization -** Do not defeat the safety purpose of the polarized or grounding-type plug.

 A polarized plug has two blades with one wider than the other.

 A grounding type plug has two blades and a third grounding prong.

 The wide blade or the third prong are provided for your safety.

 If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet

5. .**Power Sources -** This video product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your location, consult your video dealer or local power company. For video products intended to operate from battery power, or other sources, refer to the operating instructions.

6. **Overloading -** Do not overload wall outlets of extension cords as this can result in the risk of fire or electric shock. Overloaded AC outlets, extension cords, frayed power cords, damaged or cracked wire insulation, and broken plugs are dangerous. They may result in a shock or fire hazard. Periodically examine the cord, and if its appearance indicates damage or deteriorated insulation, have it replaced by your service technician.

7. **Power-Cord Protection -** Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the video product.

8. **Ventilation -** Slots and openings in the case are provided for ventilation to ensure reliable operation of the video product and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the video equipment on a bed, sofa, rug, or other similar surface. This video product should never be placed near or over a radiator or heat register. This video product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the video product manufacturer's instructions have been followed.

9. **Attachments -** Do not use attachments unless recommended by the video product manufacturer as they may cause a hazard.

10. **Water and Moisture -** Do not use this video product near water. For example, near a bath tub, wash bowl, kitchen sink or laundry tub, in a wet basement, near a swimming pool and the like.

 Caution: Maintain electrical safety. Powerline operated equipment or accessories connected to this unit should bear the UL listing mark of CSA certification mark on the accessory itself and should not be modified so as to defeat the safety features. This will help avoid any potential hazard from electrical shock or fire. If in doubt, contact qualified service personnel.

11. **Accessories** - Do not place this video equipment on an unstable cart, stand, tripod, or table. The video equipment may fall, causing serious damage to the video product. Use this video product only with a cart, stand, tripod, bracket, or table recommended by the manufacturer or sold with the video product. Any mounting of the product should follow the manufacturer's instructions and use a mounting accessory recommended by the manufacturer.

Service

13. **Servicing -** Do not attempt to service this video equipment yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

14. **Conditions Requiring Service** - Unplug this video product from the wall outlet and refer servicing to qualified service personnel under the following conditions.

 A. When the power supply cord or plug is damaged.

 B. If liquid has been spilled or objects have fallen into the video product.

 C. If the video product has been exposed to rain or water.

 D. If the video product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions. Improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the video product to its normal operation.

 E. If the video product has been dropped or the cabinet has been damaged.

 F. When the video product exhibits a distinct change in performance. This indicates a need for service.

15. **Replacement Parts -** When replacement parts are required, have the service technician verify that the replacements used have the same safety characteristics as the original parts. Use of replacements specified by the video product manufacturer can prevent fire, electric shock or other hazards.

16. **Safety Check** - Upon completion of any service or repairs to this video product, ask the service technician to perform safety checks recommended by the manufacturer to determine that the video product is in safe operating condition.

17. **Wall or Ceiling Mounting** - Any cameras provided with this system should be mounted to a wall or ceiling only as instructed in this guide, using the provided mounting brackets.

18. **Heat** - The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

Use

19. **Cleaning -** Unplug the video product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

20. **Product and Cart Combination** - Video and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the video product and car combination to overturn.

21. **Object and Liquid Entry -** Never push objects for any kind into this video product through openings as they may touch dangerous voltage points or “short-out” parts that could result in a fire or electric shock. Never spill liquid of any kind on the video product.

22. **Lightning** - For added protection for this video product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the video product due to lightning and power line surges.

NOTE

This equipment has been certified and found to comply with the limits regulated by FCC, EMC, and LVD. Therefore, it is designated to provide reasonable protection against interference and will not cause interference with other appliance usage.

However, it is imperative that the user follows this manuals guidelines to avoid improper usage which may result in damage to the unit, electrical shock and fire hazard injury

In order to improve the feature functions and quality of this product, the specifications are subject to change without notice from time to time.

FCC CLASS B NOTICE

Note:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception (which can be determined by turning the equipment on and off), the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio or television technician for assistance

General Precautions

1. All warnings and instructions of this manual should be followed
2. Remove the plug from the outlet before cleaning. Do not use liquid aerosol detergents. Use a water dampened cloth for cleaning
3. Do not use this unit in humid or wet places
4. Keep enough space around the unit for ventilation. Slots and openings in the storage cabinet should not be blocked
5. During lightning storms, or when the unit is not used for a long time, disconnect the power supply, antenna, and cables to protect the unit from electrical surge

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DVR FEATURES



- 4-channel operation
- Pentaplex operation allows you to View, Playback and Record video simultaneously (Local & Remote)
- Advanced MPEG4 video compression
- 120 fps recording
- Graphical User Interface
- USB ports for data back up & firmware upgrades
- VGA and composite video outputs for connection to any computer or security monitor
- Custom recording settings for each camera on the system
- Covert Camera Viewing

Table of Contents

Getting Started **1**
Front Panel **2**
Rear Panel **3**
Remote Control **4**
Mouse Control **5**
Display Modes **6**
Initial Loading Sequence 6
Individual Camera Display 6
Network Connectivity Indicator 7
Display Modes 7
PTZ (Pan/Tilt/Zoom) & Focus Controls **8**
System Power Off **9**
Key Lock 9
System Shutoff 9
Menu Navigation Controls & Tips **10**
Menu Navigation Controls 10
Virtual Keyboard Control 10
Active Option Indicator 10
Playback and Navigation Controls 11
Recording Menu Controls **12**
PANIC RECORDING 12
Record Setup Menu 12
Recording Operations 12
SIMPLE RECORDING 13
ADVANCED RECORDING 14
Setting 14
Activation 15
MANUAL RECORDING 16
Search Mode **17**
Search By Time 17
Search By Event 18
System Setup Controls **19**
System Setup Menu **20**
OSD (Onscreen Display) 20
MONITOR 21
Camera Menu **22**
CAMERA TITLE 22
COLOR SETUP 23
PTZ SETUP 23
PTZ PROPERTIES 24
MOTION SENSOR 24
Sound Menu **25**
SOUND 25
BUZZER 25
System Menu **26**
DATE/TIME 26

NETWORK 27
MAIL SETUP 28
USER MANAGEMENT 29
SYSTEM MANAGEMENT 30
CONTROL DEVICE 32
Event / Sensor 33
HDD EVENT 33
ALARM INPUT 34
ALARM OUTPUT 34
BUZZER OUTPUT 35
EMAIL NOTIFICATION 36
Disk Management 37
Archiving 38
Network Connectivity Overview 40
IP & MAC Address 41
Finding Your External IP Address 41
Setting Up Your DDNS Account 42
Router Port Forwarding 44
DDNS SETUP 45
Troubleshooting 46
Appendix 1: System Specifications 47
Appendix 1: System Specification (cont'd.) 48
Appendix 1: System Specification (cont'd.) 49
Appendix 2: Digimerge Client Software Requirements 50
Appendix 3: Monitor Out 51
Appendix 4: Connecting Motion/Alarm Devices 52
Appendix 5: Connecting a PTZ Camera 53
Appendix 6: Full Connectivity Diagram 54
Appendix 7: Replacing the Hard Drive 55
Appendix 8: Using the Storage Calculator 57
Appendix 9: System Setup Tips 58
Appendix 10: Using Listen-In Audio 63
Appendix 11: Playing Recorded Video Data 64
Appendix 12: Recording Modes 66
Appendix 13: Setting Up Remote Viewing 68

Getting Started

The system comes with the following components:



DIGITAL VIDEO SURVEILLANCE RECORDER



POWER ADAPTOR



REMOTE CONTROL

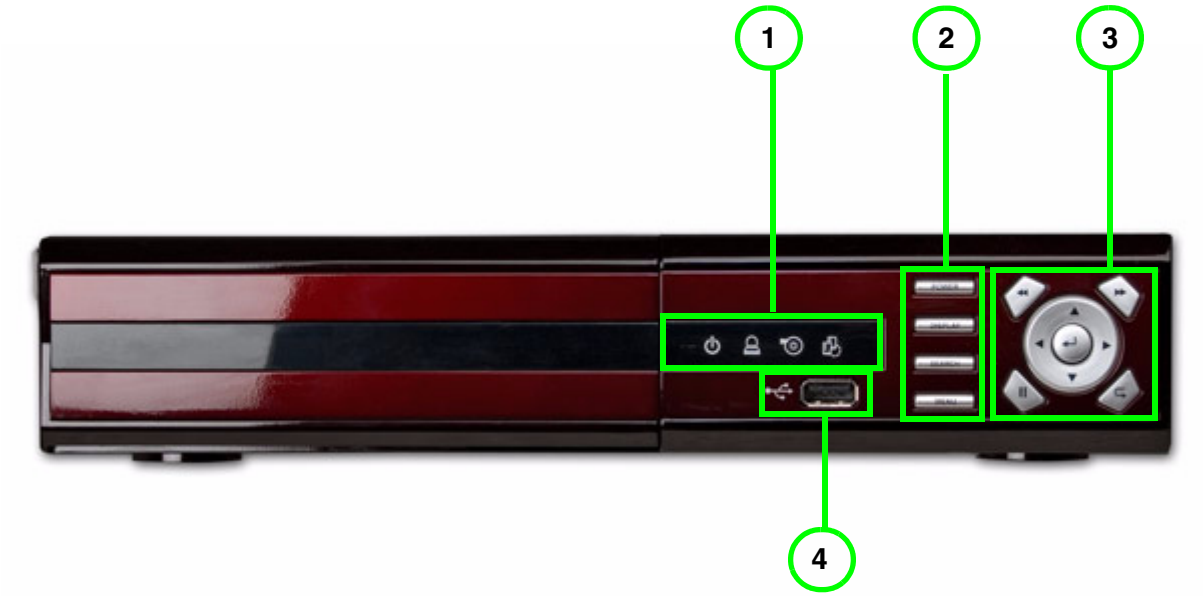


HARDWARE & SOFTWARE MANUALS, QUICK START GUIDE & SOFTWARE CD

HARD DRIVE SIZE, NUMBER OF CHANNELS, AND CAMERA CONFIGURATION MAY VARY BY MODEL. PLEASE REFER TO YOUR PACKAGE FOR SPECIFIC CONTENT DETAILS.

CHECK YOUR PACKAGE TO CONFIRM THAT YOU HAVE RECEIVED THE COMPLETE SYSTEM, INCLUDING ALL COMPONENTS SHOWN ABOVE.

Front Panel

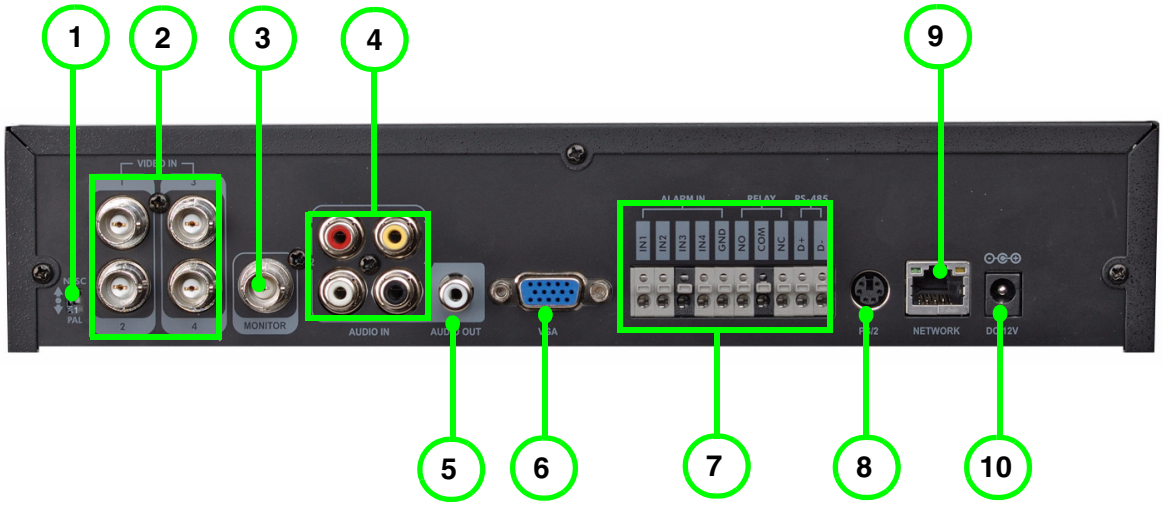


1. **INDICATOR LEDs** - Indicates the DVR status:
 - PWR - Indicates that the DVR is ON/OFF (RED LED).
 - ALM - Indicates that the unit has an active ALARM.
 - REC - Indicates that the DVR is currently recording (when the RED LED is ON).
 - NET - Indicates that the unit is connected to the Network (when the GREEN LED is ON)
2. **Function Buttons**: Power, Display, Search, and Menu.
3. **PLAYBACK / NAVIGATION CONTROLS** - Controls the playback of video, and navigates in the main screen in Menu and Search Modes.



 - ◀◀ Decreases the playback speed in both Forward and Reverse play (2x, 4x, 8x, 16x, 32x & 64x).
 - ▶▶ Increases the playback speed in both Forward and Reverse play (2x, 4x, 8x, 16x, 32x & 64x).
 - ▲▼ Move cursor up, down
 - ◀ Move cursor left; reverse playback
 - ▶ Move cursor right; forward playback
 - ↵ Confirms selected menu options.
 - II Pauses the video playback.
 - ⮌ Exit/close menus; exit active editing mode for selected menu options.
4. **USB port**: Connect backup media, such an external USB hard drive, or DVD-R/RW drive.

Rear Panel

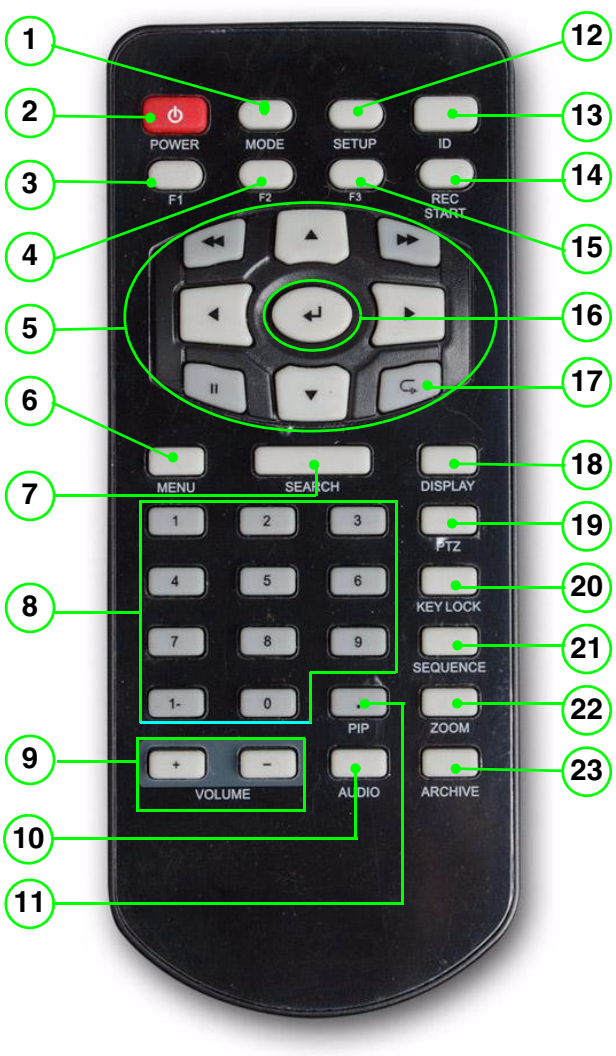


1. **NTSC/PAL SWITCH** - Set the unit to either NTSC (North America) or PAL (Europe).
2. **BNC VIDEO INPUTS** - Channel 1~4 Camera inputs (used to connect Cameras with BNC connection type). Cameras with BNC connections require an additional power adaptor.

 NOTE: Additional BNC Inputs are available on the 8 and 16 channel models.
3. **MONITOR OUT** - Video Output port to connect the unit to a secondary DVR or TV. Directly reflects the current onscreen images.
4. **RCA AUDIO INPUTS** - Channel 1~4 Audio inputs (for BNC type cameras with standard RCA Audio output).
5. **AUDIO OUT** - Audio Output port to connect the unit to a secondary DVR or TV.
6. **VGA OUT** - Video Output port to connect the unit to a Computer Monitor. Directly reflects the current onscreen images.
7. **ALARM BLOCK (INPUT/OUTPUT) & RS-485 PTZ TERMINALS** - These terminals are used to connect:
 - External alarm devices such as a motion sensor, door/alarm sensor, or time lapse VCR for Alarm Recording.
 - The block is also used to connect Relay and RS-485 Connection types. These terminals are used to control PTZ (Pan/Tilt/Zoom) type cameras.

 Please refer to Appendices #4 and #5 for configuration details.
8. **PS/2 port**: Connection port for a PS/2 mouse (not included).
9. **ETHERNET PORT** - Located on the back of the unit, above the Alarm Block terminals. Connects the monitor to a router for connection to the internet. Refer to the appendices for Remote Connection setup.
10. **DC POWER INPUT** - Connect the AC power using the power cord provided with the unit from the monitor to an electrical outlet

Remote Control



1. **MODE:** Press the Mode Button to display the Multi-Function Mode Menu.
2. **POWER**: Press the Power Button to turn off the Monitor Display. Press to open the Shutdown window.
3. **F1**: Opens the System Information window.
4. **F2:** N/A.
5. **NAVIGATION/PLAYBACK:** Press the Navigation Controls to move Up, Down, Left or Right in System and Mode menus. Press Up/Down to change values while in active editing mode for a selected menu option. Use the Playback controls to Pause, Play, Reverse or Fast-forward the Playback in DVR Mode.
6. **MENU:** Opens the system menu.
7. **SEARCH BUTTON:** Displays the Video Playback Search menu.
8. **NUMBER KEYPAD**: Use to switch between Cameras in live view mode.
9. **Volume +/-**: Increase or Decrease the volume of the camera currently broadcasting live audio.
10. **AUDIO CHANNEL SELECT**: Switches between live audio channels (CH1~4 only). Press Audio and select Channel 1~4.
11. **PIP**: Displays the Component Input in the PIP Screen in the lower right corner.
12. **DVR SETUP**: Displays the DVR Setup Menu.
13. **REMOTE ID:** Changes the ID for the remote control to match the System ID (if changed). Use the Remote ID when using one remote to control multiple systems). To set the Remote to default, press and hold the Remote ID button for 5 seconds, then select number 1. Press the Enter and Return buttons.
14. **REC START**: Begin recording.
15. **F3:** N/A.
16. **ENTER BUTTON**: Press the Enter Button to select an option in the System Menu or Multi-Function Menu.
17. **RETURN**: Exits from a System Menu.
18. **DISPLAY**: Switches the display to single, quad and multi-display views.
19. **PTZ**: Switches to PTZ Mode.
20. **KEYLOCK**: Locks all keys (except the Mode button).
21. **SEQUENCE**: Changes the Monitor Display to Sequence through channels (based on menu settings).
22. **ZOOM**: Displays one channel with Digital Zoom.
23. **ARCHIVE**: Displays the Archive menu.

Mouse Control

Connect a PS/2 mouse to the PS/2 port on the rear panel of the unit.

Note: The USB front on the front panel is recommended for media backup.

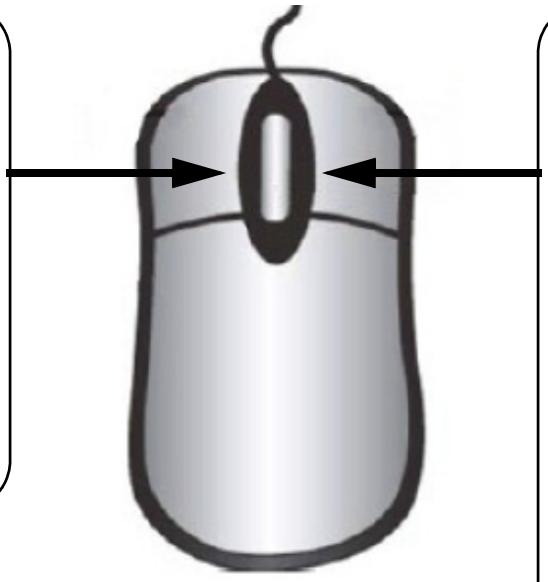


Mouse Controls

Use the Left and Right Buttons to open menus and change options:

LEFT BUTTON -

- Double click on a Channel in QUAD or other views to view the single camera in full screen.
- Click to use the Controls in PTZ Mode.
- Click to select options in Menu, Recording and Search Mode.
- Use the left button to change settings, select dates and perform other options.



RIGHT BUTTON - Opens a submenu to access a list of options:



Display Modes

Initial Loading Sequence

- Press the POWER button located on the front panel of the DVR to start the unit.
- The DVR will perform a Hard Drive check
- The unit will initially load to a quad split-screen view.



NOTE: If a new **HARD DRIVE** is detected, the system will prompt you to FORMAT the drive. If you do not choose to format the HARD DRIVE, the drive will not be detected by the system.

If you choose to FORMAT a drive in this way, the drive will no longer be readable by a regular PC without using the **HARD DRIVE VIEWER** software included on the CD provided with this unit.

Individual Camera Display

Each channel displays the Camera Name and Recording Status:

: Record

: Pre Record

C: Continuous

M: Motion

A: Alarm



Network Connectivity Indicator

The Network Indicators appear when a remote connection is made to the unit via the Remote Agent software, or through the Internet Explorer Web Client:

- Green: Indicates that the network connection is stable.
- Blue: Indicates that the network connection is experiencing difficulties.
- Red: Indicates that the network is unstable.



Network Indicators

Display Modes

Cameras can be displayed in several different modes by pressing the Display Button on the front panel of the system, or by pressing the SCR Button on the Remote Control:



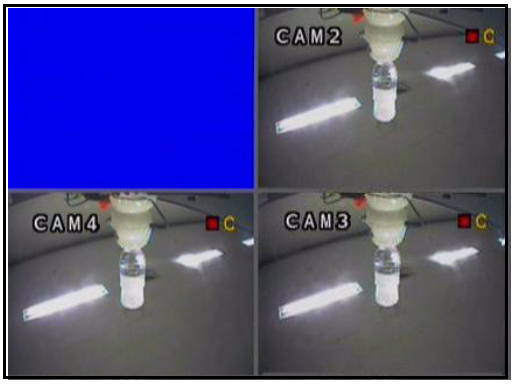
Full-screen single channel



Quad split-screen

Covert Camera Mode

- Displays the Camera in Covert Mode.
- The Camera is not displayed - an empty blue screen is displayed instead of the Video.
- Covert cameras are configured from the Menu.



PTZ (Pan/Tilt/Zoom) & Focus Controls

The PTZ / Focus Menus will only work with PTZ type cameras (not included):

PTZ Control Screen



Press the PTZ Button on the front panel of the system, or on the Remote Control to access the PTZ Control Screen:

- The onscreen icons represent buttons on the front panel and remote control (up/down/left/right). The Camera can be adjusted using these buttons
- Press the Return Button to exit PTZ Mode.

Focus Control Screen



Press the PTZ Button a second time to access the Focus Control Screen:

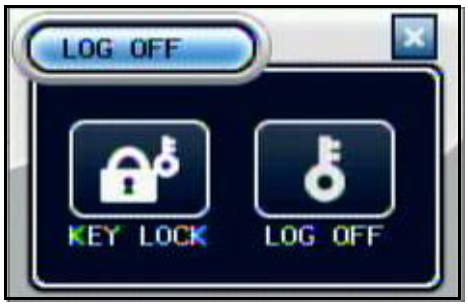
- The onscreen icons represent buttons on the front panel and remote control (up/down/left/right). The Camera can be adjusted using these buttons
- F: Indicates FOCUS
- I: Indicates IRIS
- Press the Return Button to exit PTZ Mode.

NOTE: Make sure that the PTZ Settings are configured in the Menu before attempting to use any of the PTZ Menu Functionality.

System Power Off

System Log Off

- Open the system Menu and select LOGOFF.
- Select LOG OFF and press the ENTER button.
- Select Yes and press the ENTER button to log off.
- To log on, open the system Menu and select any option and enter your user ID and password in the login window.



Key Lock

- Open the system Menu and select LOGOFF.
- Select KEY LOCK and press the ENTER button.
- Select YES and press the ENTER button to confirm Key Lock.



System Shutoff

- Press the Power Button on the front panel or press the power button on the remote control to open the Shutdown window.
- Only the ADMIN can turn the unit ON/OFF.
- The System will NOT continue to record while the unit is off.
- The LED indicators on the front of the System will be OFF.

NOTE: There are three available system permission levels:

- **Admin**: Configured into the System by default.
- **Manager**: Permission level when adding a new user to the System - provides Access to Search and view live video (remote)
- **User**: Permission level when adding a new user to the System - provides the ability to view live video only (remote).



You can also right-click anywhere on the screen and select **SHUTDOWN** from the Menu.

Menu Navigation Controls & Tips

Menu Navigation Controls

When navigating the system menu, use the navigation buttons on the remote control to peform the following:

1. Press ▲ ▼ ◀ ▶ to select a menu option (selected option will be highlighted in *BLUE*.
2. Once a option is selected, press the **ENTER button** to confirm the option and enter *active editing mode* (menu option will be highlighted in *RED*).
3. Press ▲ ▼ to change the value of the option in active editing mode.
4. Press the **RETURN button** to exit active editing mode for the selected option.



Virtual Keyboard Control

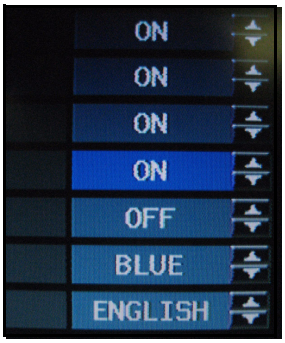
The Virtual Keyboard control becomes available when keyboard input is needed for entering information such as Names, Network Information, etc.

- Includes a~z, A~Z, 0~9 and Symbols. @#$%^&*()
- Navigate using the arrow keys on the Front Panel or Remote Control.
- Use the ENTER key to choose the letters, numbers and symbols.
- Select the APPLY button once the setup is completed.

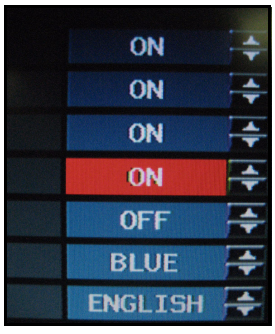


Click to View Uppercase and Symbols

Active Option Indicator



Blue Highlight - Indicates that the option is available for editing. Once the option is highlighted, press the ENTER key to edit the option (highlights changes to Red).



Red Highlight - Indicates that the option is in active editing mode. Press the RETURN button to exit the option.
Yellow Highlight - with certain options, yellow indicates the option is in active editing mode.

Playback and Navigation Controls



1. **Power**: Press to turn on the system; press to open the shutdown menu.
2. **Display**: Press to open the Display menu.
3. **Search**: Press to open the Search menu.
4. **Menu**: Press to open the system Menu.
5. **Navigation / Playback**:

 - ▲: Move menu cursor up.
 - ▼: Move menu cursor down.
 - ▶: Forward playback; move menu cursor right.
 - ◀: Reverse playback; move cursor left.
 - II : Pause playback; Fast Forward and Reverse playback buttons can be used while the video is paused to move to the Next / Previous frame.
 - ⏩: Increase forward playback speed (2~64X)
 - ⏪: Increase reverse playback speed (2~64X)
 -  : Confirm menu selection; turn selected menu option into active editing mode.
 -  : Exit/close menu; exit active editinf mode from selected menu option.

Recording Menu Controls

PANIC RECORDING

From the sub-menu, select REC START to begin Panic Recording. To stop panic recording, open the sub-menu and select REC STOP.



Record Setup Menu

- Right-click anywhere on the screen to open the sub-menu.
- Select **RECORD SETUP**.
- **RECORDING OPERATIONS** - General setup of Recording Features
- **SIMPLE RECORDING -** Setup for the Continuous and Motion recording types. Can be set to Advanced.
- **MANUAL RECORDING** - Manually adjust image size, frame rate, picture quality, and set recordable audio channels.



Recording Operations

- **RECORDING MODE**- Set to either Simple or Advanced recording. The tab on the left side will change if you change the recording mode.
- **SCHEDULE MODE**- Sets the Scheduled Recording Mode to Daily or Weekly.
- **PRE EVENT RECORDING** - When an alarm is detected, the Pre Alarm will begin recording before the Alarm was detected (retrieved from video cache). The Pre Alarm Recording Time can be set to between 1~5 seconds.
- **POST EVENT RECORDING** - When an alarm is detected, the Post Alarm will remain recording for the specified time. The Post Alarm Recording Time can be set to between 5~180 seconds.

↑↓←→ : Scroll UP/DOWN/LEFT/RIGHT within a menu option

OK : Press this button to select and change the values in a menu option

MENU : Complete modifications of a menu option; exit a menu

SIMPLE RECORDING

Simple Recording allows you to easily set recording parameters for each camera using the Time Interval bar.

- **RECORD QUALITY** - Set from Normal, Fine, High, and Highest.
- **RECORD SIZE** - Sets the video capture size for each camera to 352x240, 704x240 or 704x480.



NOTE: As you change the Record Size, FPS also changes to best match the record size. However, you can change FPS to your own setting as desired.

- **FPS** - Sets the Frames Per Second for recording for each channel. Each channel can be set to 1, 2, 3, 7, 15 or 30 Frames per second (real time video capture) from a shared pool of 240 FPS.

Select the time grid and press the ENTER button. Check the boxes for the following:

- **Continuous** - The system constantly records the camera based on the hourly setting.
- **Motion** - Only starts the recording if motion is detected in the selected time interval.. Select OK and press the ENTER button.
- **Alarm** - The system only records if an alarm or sensor is triggered.

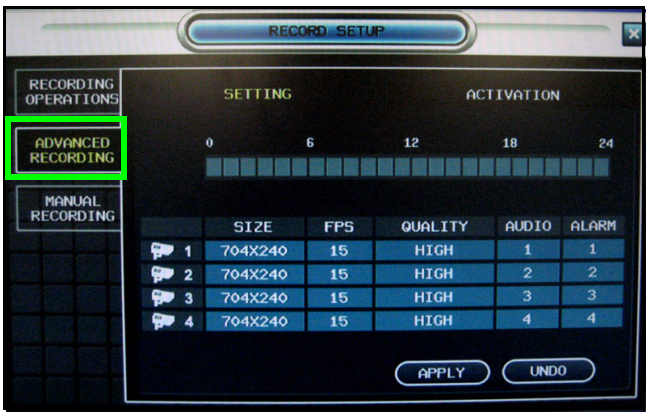


Select OK and press the ENTER button to save your settings and close the Camera Settings window. From the Record Setup window, select APPLY and press the ENTER button to save your settings.

ADVANCED RECORDING

Under Recording Operations, select Advanced and select APPLY to view the Advanced Recording tab.

Use Manual Recording to customize recording size, FPS, image quality, and audio for each camera. You can also set Manual (Panic) Recording Time.



Setting

Edit parameters for each camera using the Time Interval Bar.

Using the Time Interval Bar

Parameters for each camera are set by hour using the Time Interval bar.

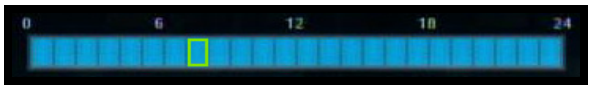
Press the ENTER key to select the Interval Bar, and navigate using the arrow keys.

Select an Hour and press ENTER again to open the Camera Settings for the selected hour.

Select an Hour (highlighted in Green), and press ENTER again to open the Camera Settings for the selected hour.



Time Interval Bar



Selected Hour



Changed Time Block

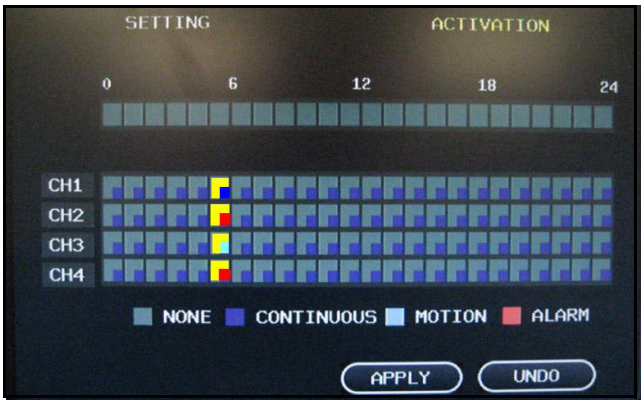
- **SIZE** - Sets the video capture size for each camera to 352x240, 704x240 or 704x480.
- **FPS** - Sets the Frames Per Second for recording for each channel. Each channel can be set to 1, 2, 3, 7, 15 or 30 Frames per second (real time video capture) from a shared pool of 240 FPS. This is reflected in the Frame Remaining bar below Panic Recording Time.
- **Quality** - Sets the video recording quality to Low, Standard, High or Highest.
- **Audio** - The Audio Recording Settings work differently on the 4 CH and 8/16 CH Models:
- **Alarm** - Assign an alarm trigger (1~4) for each channel.

Select the APPLY button to save your settings, or select UNDO to cancel without saving.

Note: The changed time block will be displayed in yellow on the Time Interval bar; time block will also be yellow in the Activation menu.

Activation

Select Activation to apply Event Recording (Continuous, Motion, Alarm) to each channel per hour.



Note: The changes you make in the SETTINGS menu will be reflected in the ACTIVATION menu.

Select the Channel grid and press ENTER. Select individual hour block and press ENTER to open the setup menu.

Check the boxes for the following:

- **Continuous** (Dark Blue) - The system constantly records the camera based on the hourly setting.
- **Motion** (Light Blue) - Only starts the recording if motion is detected in the selected time interval.. Select OK and press the ENTER button.
- **Alarm** (Red) - The system only records if an alarm or sensor is triggered.



Select OK and press the ENTER button to save your settings and close the Camera Settings window. From the Record Setup window, select APPLY and press the ENTER button to save your settings.

MANUAL RECORDING



Use Manual Recording to customize recording size, FPS, image quality, and audio for each camera. You can also set Panic Recording Time.

Parameters for each camera are set by hour using the Time Interval bar.

Press the ENTER key to select the Interval Bar, and navigate using the arrow keys.

Select an Hour (highlighted in Green), and press ENTER again to open the Camera Settings for the selected hour.

- **SIZE** - Sets the video capture size for each camera to 352x240, 704x240 or 704x480.
- **FPS** - Sets the Frames Per Second for recording for each channel. Each channel can be set to 1, 2, 3, 7, 15 or 30 Frames per second (real time video capture) from a shared pool of 240 FPS. This is reflected in the Frame Remaining bar below Panic Recording Time.
- **Quality** - Sets the video recording quality to Low, Standard, High or Highest.
- **Audio** - The Audio Recording Settings work differently on the 4 CH and 8/16 CH Models:
- **4CH Model:** Select Audio channel 1~4 for each camera.
- **MANUAL RECORDING TIME** - Set the amount of time for the system to record in manual (Panic) Mode from 5~60 minutes.

Select the APPLY button to save your settings, or select UNDO to cancel without saving.

Search Mode

Search mode allows you to locate previously recorded video by Date and Time, or by Event Type.

- Press the Search Button on the front panel or Remote Control, or open the system Menu and select SEARCH.
- Enter the User Name and Password (if required).
- Use the Left / Right arrows on the Front Panel or Remote Control to switch between the Search By Time and Search By Event screens.



Search By Time

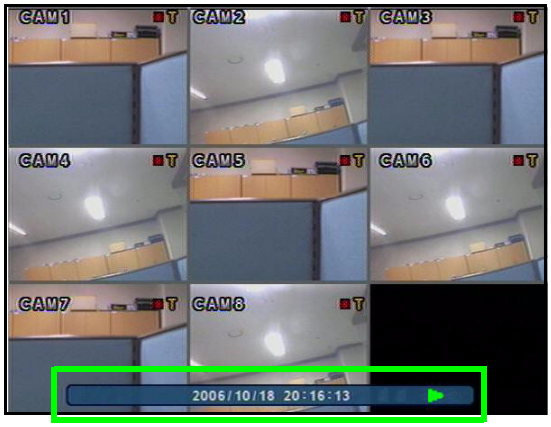
Searches the system based on date and time.

- Press the Enter button to access the Calendar (on the left side of the screen)
- Press ENTER to select and confirm the year, month and calendar dates. The calendar will be highlighted in YELLOW when active.
- Navigate within the calendar using the Arrow Keys on the front panel or remote control.
- Once the date has been located, press the Enter button to accept the date, and to access the Time Search (on the right side of the screen).
- Press and Hold the arrow keys to select the Time (increments of 1 minute). Pressing the button without holding will increment 15 minutes.
- Press the Enter button to start the playback. Press the Return button to stop playback and return to the Search By Time screen.

NOTE: The unit will continue to record data while in Playback Mode.



Any days highlighted with GREEN indicate that there is recorded video data.



The Date and Time will be displayed at the bottom of the screen. A playback icon will appear indicating that the unit is in Playback mode.

Search By Event

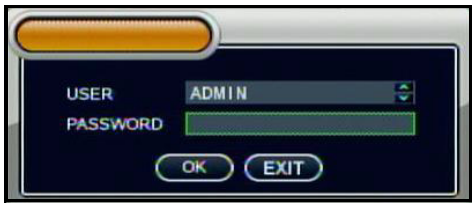
Searches the system based on Event Type (Alarm, Motion, Continuous or System).



- Press the right arrow button on the front panel or remote control to access the Search By Event screen.
- Select From and To dates, Events (Alarm, Continuous, Motion and Other) and Cameras
- Navigate within the options using the Arrow Keys on the front panel or remote.control. Press the Enter button to select or deselect options (Note: Multiple event types can be selected).
- Navigate to the Start button at the bottom of the screen and press the Enter button. A listing of events will be displayed.
- Navigate to an event, and press the Enter button to start the playback. Press the Return button to stop the playback.and return to the Event Search screen.

System Setup Controls

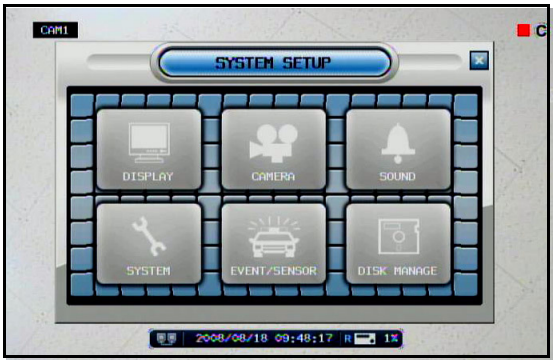
- Open the **MENU** screen by pressing the **MENU** button. Login with your user ID and password if required.
- Select SYSTEM SETUP and press the ENTER button.
- Scroll through the options by pressing the **UP**, **DOWN** buttons on the Front Panel or Remote Control.
- To enter a sub-menu, select the option and press the **ENTER** button. To exit a **SUBMENU**, press the **RETURN** button.
- The 4-channel version also contains a "Shutdown" button on the **ENTERING SETUP** Menu.
- To exit the **MENU**, press the **RETURN** button.





NOTE: Options may differ between the 4 Channel and the 8/16 Channel Models. Carefully review the following menu options for details.

DISPLAY - Setup of display options.
CAMERA - Setup for individual Cameras.
SOUND - Sound settings for the System.
SYSTEM - System and Network settings.
EVENT/SENSOR - Alarm and Event setup.
DISK MANAGE - Hard drive options.



↑↓←→: Scroll UP/DOWN/LEFT/RIGHT within a menu option

ENTER: Press this button to select and change the values in a menu option

RETURN: Complete modifications of a menu option; exit a menu

System Setup Menu

- Open the Menu and select SYSTEM SETUP.
- Select DISPLAY and press the ENTER button.



The Display Menu controls:

OSD - Onscreen display settings control the camera titles, event indicators, and general screen settings.

MONITOR - Display settings for Alarm and Events

OSD (Onscreen Display)



- **Status Bar** - Turns the status bar ON/OFF. The status bar displays:
- Recording State (Recording: Red, Pre-recording: Green)
- Network Indicators
- Time and Date
- % HDD Free
- Refer to Recording Settings.
- **Camera Title** - Turns the display of the Camera Titles ON/OFF.
- **Event Icon** - Turns the Event Icon display ON/OFF.



OSD (Onscreen Display)

- **Motion Sensor Display** - Turns the display of the Motion Sensor to:
- **Active**: Display motion sensor of motion detection area.
- **Inactive**: Display motion sensor except motion detection area.
- **Off**: No display of motion sensor.
- **Motion Color** - Sets the motion sensor color. When Motion is detected on a channel, the moving parts of the image will be highlighted with colored squares (i.e. Blue Squares).
- **Language** - Select the system language.



MONITOR

- **Sequence Dwell** - Sets the cycle time when the system is in Sequence Mode (between 1~60 seconds).
- **Alarm Pop-Up Mode** - Set to ON/ OFF. Switches the screen display to any channel when an Alarm is detected.
- **Alarm Pop-Up Dwell** - Determines the length of time that a channel is displayed when an Alarm is detected (between 1~60 seconds).
- **Motion Pop-Up Mode** - Set to ON/ OFF. Switches the screen display to any channel when Motion is detected.
- **Motion Pop-Up Dwell** - Determines the length of time that a channel is displayed when Motion is detected (between 1~60 seconds).



Camera Menu

The Camera Settings and Controls:

CAMERA TITLE - Settings for the onscreen display of individual Camera Titles.

COLOR SETUP - Color settings for individual cameras.

PTZ SETUP - Configuration for PTZ type cameras (not included with the system).

MOTION SENSOR - Configuration for Video Motion Detection.



CAMERA TITLE



- **CAM #** - Indicates the Camera Number (corresponds to the BNC connection port on the back of the system).
- **Covert** - Turns the onscreen display of the Camera ON/OFF. Covert Cameras continue to record, however the camera is not displayed onscreen. This feature is commonly used in situations where the Monitor is located in a public area, and a camera should not be displayed (i.e. Located in a Cash Count room, or directed at a Cash Register).
- **Title** - Sets the name for the individual camera (0~9, A~Z) up to # characters, by using the Virtual Keyboard:
- **Virtual Keyboard** - Appears when the Camera Title change is selected. Navigate with the arrow keys, and press ENTER to select a Number or Letter.
- **APPLY** - Saves the Title change.
- **UNDO** - Exit without saving.



COLOR SETUP

Displays the settings for **Brightness, Contrast, Tint and Color** for individual cameras.

- Press the ENTER Button and select a camera, or double-click using the mouse.
- Set the **Brightness**, **Contrast**, **Tint and Color** for each camera. These settings can be set to a range of 1(low)~100(high)
- Press the **RETURN** button to return to the Camera Color Setup screen.



PTZ SETUP

PTZ Setup is for PTZ Type Cameras ONLY, which are not included with this system. For more information on PTZ Cameras, visit us on the web at www.digimerge.com

- **ADDRESS** - Select the physical address location of the PTZ Camera (as connected to the rear PTZ Control Block. Refer to the appendices for details).
- **PROTOCOL** - Select the Protocol for the PTZ Camera. See the list of compatible protocols below. Consult the Owners Manual of the PTZ Camera for further details.
- **BAUDRATE** - Setup for the PTZ Communication Speed: (2400, 4800, 9600,19200, 38400 BPS).



Press to enter the Detailed PTZ Properties screen.



Compatible PTZ Protocols:
Samsung (MRX-1000), Samsung(SCC641), Honeywell(SD1), Honeywell (GMC), Lilin(Fastdome), Fastrax(?), GC(655N), D-MAX, Sunin DSC-230, Scan Dome-?, Vicon, Philips8560-700, Sensormatic, Panasonic(WV-CS850), Panasonic(WV-CSR604), VRX-210 Kalatel(KTD-312), PELCO-D, PELCO-P, & Dynacolor(D7722).

PTZ PROPERTIES

- **Channel No.** - Camera Number.
- **PTZ Driver** - The compatible driver selected for the PTZ Camera.
- **Auto Focus** - Sets the Automatic camera focus to ON/OFF.
- **Auto Iris** - Sets the Automatic Shutter to ON/OFF.
- **Speed Controls** - Sets the Pitch, Zoom, Focus and Iris speeds between 1~5.

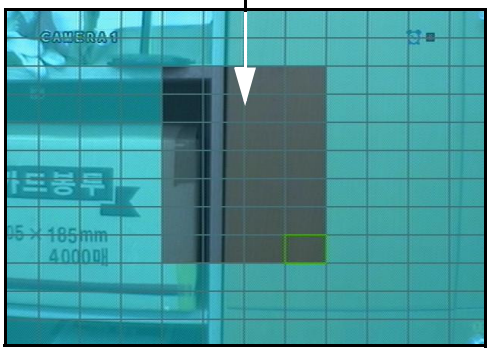


MOTION SENSOR

- **Sensitivity** - Controls the Motion Sensitivity for the individual camera between 1 (low) ~ 10 (high).
- **Area Setup** - Opens the Area Setup for the camera:



Selected Area is shaded in Grey.



AREA SETUP -
- Move the Cursor by using the directional arrows located on the Front Panel or Remote Control.
- Press Enter to select or deselect a Region.
- Press the Return key to access the confirmation screen.
- Click and drag with the Left Mouse Button.



CONFIRMATION SCREEN -
Select All - Selects all areas
Deselect All - Clears all areas
Cancel - Cancels Area Setup
Save & Exit - Saves the settings.

Sound Menu

The System Sound settings:

AUDIO - Settings for the system Audio for Live and Remote monitoring.

BUZZER - Settings for System Buzzer (audible alerts).



SOUND

- **Live Audio** - Turns Live System Audio (from the Audio on the terminal) to ON/OFF.
- **Audio Monitoring Channel** - Select the channel for Listen-in Audio (1~4).

NOTE: Listen In Audio only works with Channels 1~4 (4CH).

- **Network Audio TX** - Sets Network Audio Transmission to ON/OFF.
- **Network Audio RX** - Sets Network Audio Receive to ON/OFF.



BUZZER

- **Keypad** - Turns the Keypad buzzer ON/OFF (when a key is pressed on the Panel).
- **Remote Control** - Turns the buzzer ON/OFF when a button is pressed on the remote control.



System Menu

The System Setting controls contain:



DATE/TIME - Date and Time controls for the system.

NETWORK - Network and remote access controls.

MAIL - Mail setup

USER MANAGEMENT - Controls for system users.

SYSTEM MANAGEMENT - System specific settings and controls

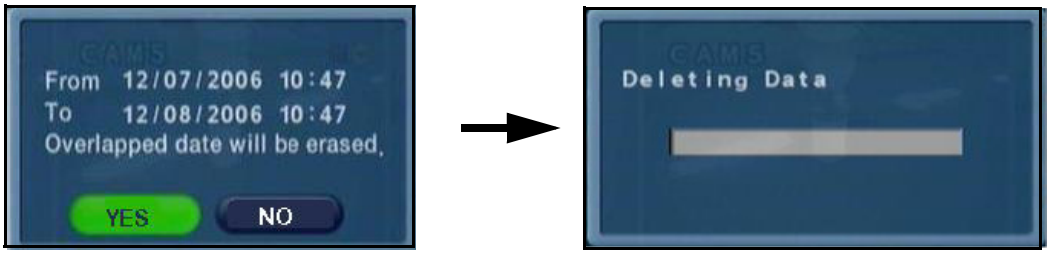
CONTROL DEVICE - Settings for an external control device (e.g. a PTZ camera) not included with the system



DATE/TIME

- **Date/Time** - Sets the current system Date and Time.*
- **Date Format** - Sets the Date Display format (MM-DD-YYYY, YYYY-MM-DD, etc.).
- **Time Format** - Sets the Time Display format to either 12 or 24 hour display.
- **Network Time Server Setup** - Synchronizes the system to the specified remote time server. Select the **SYNC** button to connect to the remote server and synchronize the time.
- **Timezone Setup** - Selections for the local Time Zone (i.e. EST, CST, PST). The **DST** (Daylight Savings Time) can be set to ON/OFF.

*** NOTE: If the Date/TIme is set into the past, a message will appear warning that Overlapped date(s) will be erased.**
**** MAKE SURE THAT THE DATE AND TIME ARE SET PRIOR TO RECORDING! ****

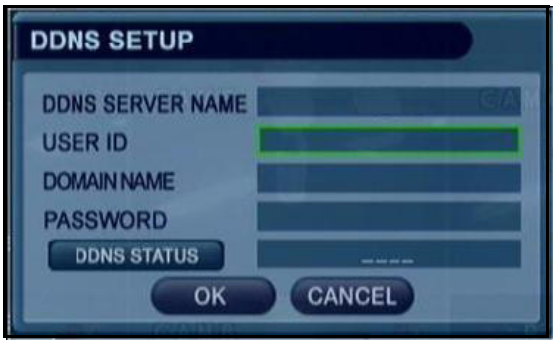


NETWORK

- **DHCP (Dynamic Host Configuration Protocol)** - Allows the System to receive Network Information from the DHCP Server (i.e. The local Router).
- If DHCP is set to ON, the IP Address, Gateway and Subnet Mask will be assigned by the DHCP Server (i.e. The local area network Router. The Router is not included with this system).
- If DHCP is set to OFF, the Network Information will need to be assigned manually.



- **DDNS (Dynamic DNS) -** Allows the System to be accessed using a fixed domain (website URL) without entering the IP address. Digimerge offers a free DDNS Service at http://ddns.digimerge.net
- If you use the DDNS, there is no need to enter the IP Address with every connection.
- Navigate to the DDNS website to configure the free account. Enter your specific information (as provided at the DDNS Site)
- Refer to the Network Setup instructions in the appendices for information on using the Free DDNS Service.



- **Web Service** - Allows the unit to be remotely accessed using Internet Explorer. This setting can be set to ON/OFF.
- **IP Address** - The IP address assigned to the System.
- **Gateway** - The network Gateway assigned by the Router (or manually entered).
- **Subnet Mask** - The network Subnet Mask assigned by the Router (or manually entered).

NETWORK



- **1st / 2nd DNS Server** - Automatically detected if DHCP is set to ON. Displays the IP address of the local DNS Server (i.e. local Router).
- **DDNS Server** - Set to the free DDNS Server provided by Digimerge (ddns.digimerge.net).
- **Net Client Port** - Default port of 6100. Used for remote connection.
- **Web Server Port** - Default port of 80. Used for remote connection.
- **Max TX Speed** - Sets the default Maximum Data Transfer speed for the remote connection (default of 8192 KB/sec.).

MAIL SETUP

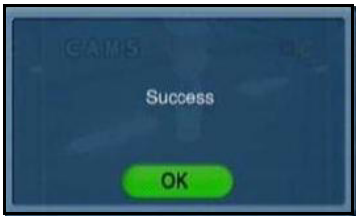
The Mail Setup uses your existing Email settings to send notifications and alerts

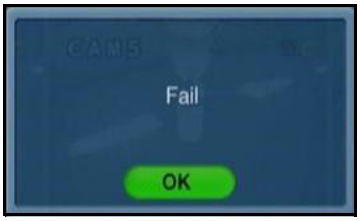


- **Default Server** - Click to use the system default.
- **Server** - Enter the Email server information for your IP.
- **Port** - Default port of 25
- **Security** - Sets the Mail Security ON/OFF (based on the requirements of the mail provider).
- **User** - Enter the User Name.
- **Password** - Enter the User Password.

NOTE: The Virtual Keyboard appears when entering the Mail Setup information.

- **Test Email** - Tests the Email Configuration, and generates a SUCCESS or FAIL message.





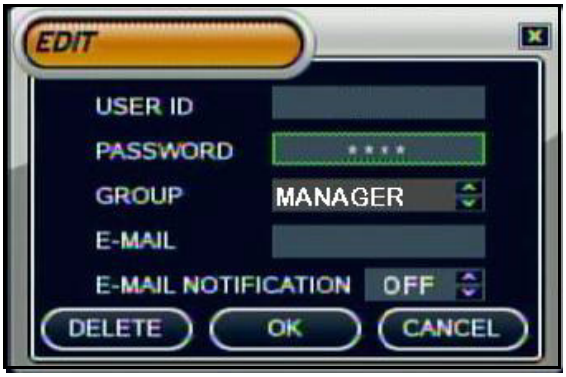
USER MANAGEMENT

- User setup consists of three groups: Administrator, Manager or User.
- Up to seven new users can be added to the system.
- **ADD** - Opens the ADD New User screen to configure the new user settings



NOTE: A maximum of 4 users can be remotely connected to the System simultaneously.

ADD User Screen



- **User ID** - Enter an ID (Name) for the new user
- **Password** - Enter a password for the New User
- **Group** - Enter the permissions level:
 - **Manager** - Mid Level Access. The Manager can use the Search Functions, and view live video.
 - **User** - Low Level Access. The User Can view cameras without changing settings.
- **Email** - Enter the Email address for the New User.
- **Email Notification** - Turns the email notifications for the user ON/OFF.

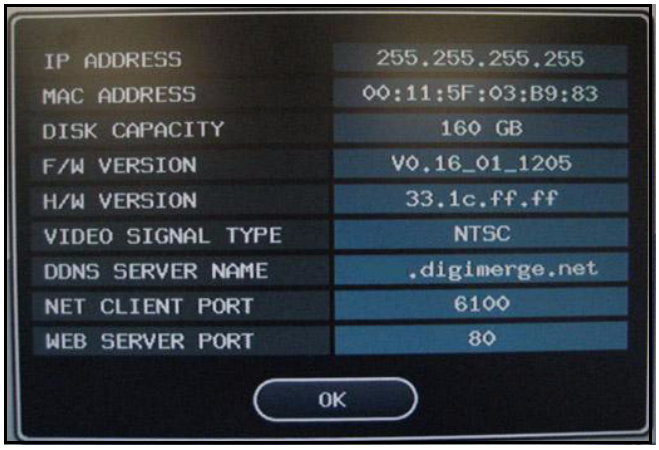
NOTE: The Virtual Keyboard appears when entering the Mail Setup information.

SYSTEM MANAGEMENT



- **System Information** - Navigate to the PRESS button, and choose ENTER to display the System Information.
- **System Name** - Input a name for the system using the Virtual Keyboard.
- **FW Update** - Navigate to the PRESS button, and choose ENTER to update the System Firmware.
- **Factory Default** - Navigate to the PRESS button, and choose ENTER to reset the System to Factory Defaults.
- **System Data** - Saves or Loads the System Data (system settings).
- **Password** - Turns the system password ON/OFF (when logging into the Menu Setup and Search Menus).

System Information Screen



Displays the System Information. The IP address and MAC address are necessary for setting up the DDNS Server.

- **IP Address** - Displays the IP address assigned to the System.
- **MAC Address** - Displays the unique MAC address assigned to the unit. This address is hard coded to the unit and cannot be changed.
- **Disk Capacity** - Displays the Total Hard Drive space, and the amount of Hard Drive in use.
- **F/W Version** - Displays the Firmware version number.
- **H/W Version** - Displays the Hardware version number.
- **Video Signal Type** - Indicates the Video Signal Type as either NTSC or PAL (depending on Region).
- **DDNS Domain Name -** The name setup when the online DDNS registration was created.
- **Net Client and Web Ports** - Displays the ports for remote connection.

SYSTEM MANAGEMENT

Firmware Update

New firmware is periodically available for download from www.digimerge.com. The firmware on the unit can be updated via the USB port:

- Download the new firmware from the website. Copy the files from the PC to the USB flash drive.
- Insert the USB flash drive into the System. Select the 'Firmware Update' option by selecting the PRESS button.
- Login with your user ID and password.
- The USB device will be recognized by the system - Press the START button to display the available firmware.
- Select the Firmware and press ENTER. A prompt will appear confirming the Update.
- Press OK to begin the update process.

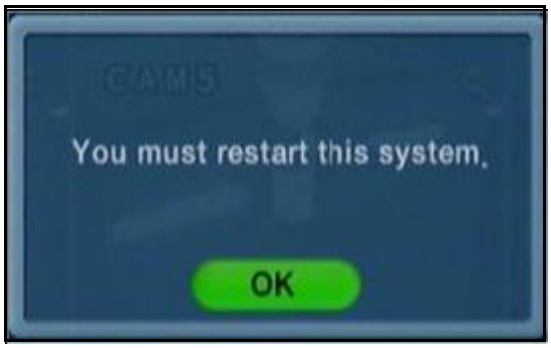


NOTE: You will need to restart your system (power off and disconnect/reconnect power cable) once the firmware has been updated for the new changes to take effect. *The DDNS Settings will need to be re-entered after the Firmware upgrade.*





- The System must be restarted for the Changes to Take effect. Press OK, and exit the Menu. The System will automatically Reboot.



SYSTEM MANAGEMENT

Factory Defaults

The System can be returned to the Factory default settings:

- Select the 'Factory Defaults' option by selecting the PRESS button.
- Login with your user ID and password.
- Choose OK to reset the unit, or CANCEL to exit without resetting.

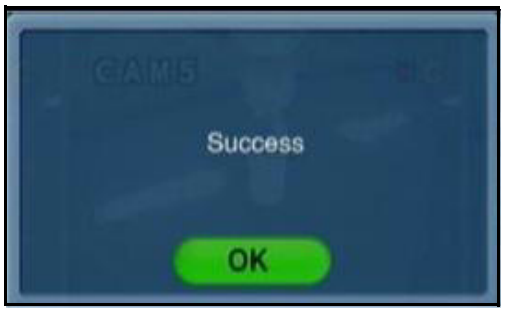


NOTE: If the System is reset to Factory Defaults, all settings will be lost (except the Date and Time).

System Data

The System settings can be saved to a USB flash drive:

- Insert the USB flash drive into the System and select the Save option to save settings:
- A Success message indicates that the backup was completed.
- If the device is not detected, a message will indicate that No storage device was found.
- Insert the USB flash drive into the System and select the Load option to restore settings.
- This is recommended after initial setup and installation is complete.

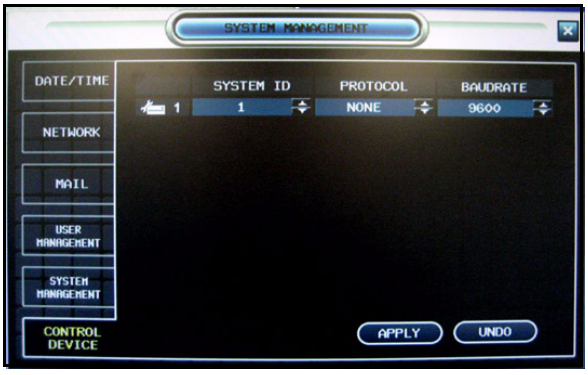




CONTROL DEVICE

Used with an external control device (not included with the system):

- **System ID** - Select system ID. (1~254)
- **Protocol** - Select protocol (from the Device user Manual).
- **Baud rate** - Setup baud rate (from the Device user Manual).



Event / Sensor

The Event Sensor Setting controls contain:

HDD EVENT - Checks the Hard Drive for errors.

ALARM INPUT - Configuration settings for an external Alarm sensor (i.e. Door / Window Sensors).

ALARM OUTPUT - Sends a signal to an external device when an alarm is detected.

BUZZER OUTPUT - Turns the audible Buzzer ON/OFF for selected event types.

E-MAIL NOTIFICATION - Sends and E-Mail notification when a selected event occurs (based on User Configuration settings).



HDD EVENT

- **Disk Full Event** - Set to ON/OFF to send a notification when the internal hard drive is full.



ALARM INPUT

Configurations for any external alarm device (i.e. a Door or Window Sensor). Refer to the appendices for hardware configuration details.



- **Operation** - Sets the Alarm Sensor Connection Status (Enable / Disable) for an external alarm (i.e. Door or Window Sensors).
- **Type:** Sets the Alarm Sensor type to N/O (Normally Open) or N/C (Normally Closed).
 - **N/O (Normally Open) -** Select for an Alarm that has a Normally Open circuit (such as a door that remains open). An Alarm will occur when this is changed to a Closed status.
 - **N/C (Normally Closed) -** Select for an Alarm that has a Normally Closed circuit (such as a Window Sensor). An Alarm will occur when this is changed to a Opened status.

ALARM OUTPUT

Sends an Alarm Out signal to a device (such as a Manual Door or independent Light/Buzzer Alarm) when an Alarm In event is detected.

Note: You must have the option, "Operation," *ENABLED* in order to configure the options in this menu.



- **Relay** - By default, 1. Non-selectable.
- **Mode** - Setup Reacted Relay as either Latched or Transparent Mode:
 - Latched – When sensor alarm activated, relay reacted in setup duration.
 - Transparent – Relay reacted temporary during sensor alarm activate.
- **Type** - Set the Relay Type to either N/O (Normally Open) or N/C (Normally Closed).
- **Operation** - Setup Relay Connect with Alarm Sensor to either Enable or Disable.

ALARM OUTPUT



- **Duration** - Sets the Reacted Relay Time. (5sec~5min or Until key-in)
- **HDD Event** - Turns the Alarm ON/OFF when the Hard Drive experiencing problems.
- **Alarm** - Sends the Alarm Out when an Alarm Event is detected (set to ON/OFF).
- **Video Loss** - Sends the Alarm Out when a Video Loss Event is detected (set to ON/OFF).
- **Motion** - Sends the Alarm Out when a Motion Event is detected (set to ON/OFF).

BUZZER OUTPUT

Generates a Buzzer when an alarm is detected.



- **Operation** - Enables / Disables the buzzer for selected Event / Alarm types.
- **Mode** - Set the Reacted Relay to either Latched or Transparent Mode.
- **HDD Event** - Generates a Buzzer alert when a Hard Drive event occurs (set to ON/OFF).
- **Duration** - Sets the Buzzer time (5sec ~ 5min or until a user logs into the system).
- **Alarm** - Generates a Buzzer Alarm when an Alarm Event is detected (set to ON/OFF).
- **Video Loss** - Generates a Buzzer Alarm when a Video Loss Event is detected (set to ON/OFF).
- **Motion** - Generates a Buzzer Alarm when a Motion Event is detected (set to ON/OFF).

EMAIL NOTIFICATION

Note: You must have the option, “Notification,” set to *ON* in order to configure the options in this menu.



- **Notification** - Sets the E-Mail notification ON/OFF.
- **HDD Event** - A notification is sent if a Hard Drive event is detected (set to ON/OFF).
- **Setup Event** - A notification is sent when changes are made to the system configurations.
- **Booting Event** - A notification is sent when system powers on.

Check the boxes under the following notification types to enable/disable it for channels 1~4:

- **Alarm**
- **Video Loss**
- **Motion**

- **Frequency** - Set the frequency of email notifications from 1 min ~ 30 min.

Disk Management

- **Overwrite** - Determines how data is maintained when the Hard Drive is full.
 - *ON* - When Overwrite is set to ON, data will be overwritten when the Hard Drive is full, starting with the Oldest recording.
 - *OFF* **-** When Overwrite is set to OFF, the data will not be overwritten when the Hard Disk is Full. Recording will Stop, and the Buzzer will be Activated.
- **Format** - Erases all Hard Drive data:
 - Press start button. A warning message will be displayed with the prompt 'All Recorded Data will be erased.'
 - Select OK to erase the data, or CANCEL to return without erasing the Hard Drive.
 - Once OK is selected, the user will be prompted to enter the **ADMIN PASSWORD.** Once the password is accepted, all Hard Drive data will be erased.

Formatting Status Indicator Window: Once the format is complete, the system will return to the Disk Manage Menu.









Archiving

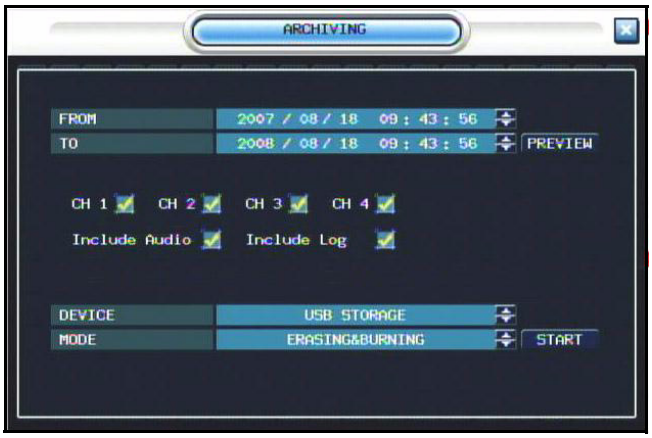
The Archive feature copies data from the internal hard drive to backup media such as an external USB hard drive, USB flash drive., or DVD-R/RW drive.



- Open the sub-menu and select **ARCHIVING**.

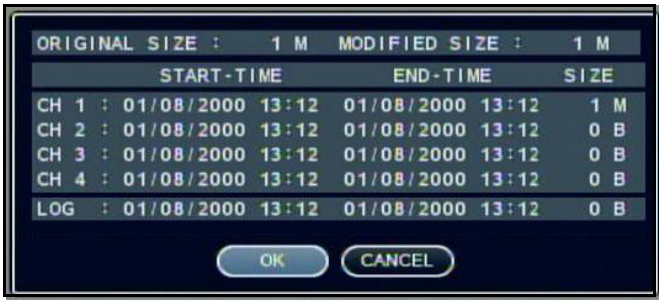
Archiving Menu

- **From** - Select the Start Time and Date for Backup.
- **To** - Select the End Time and Date for Backup.
- **A/V channel** - Select the Video and Audio Channel(s) for backup
- **Device** - Displays all detected backup media devices (USB Flash Disk or USB Hard Drive).
- **Mode** - Select the Backup Mode:
 - *Burning* - Copies the data to the backup device.
 - *Erasing & Burning*- Copies the data to the backup device, then deletes the data from the System Hard Drive.
- Select START and press the ENTER button to begin backup.



Archiving Options

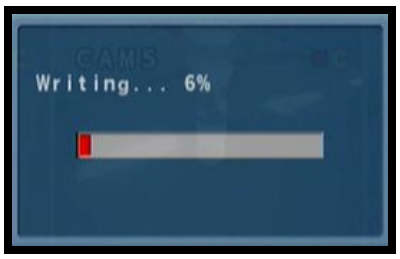
Once the Start Time, End Time and Channel Selections have been completed, select the START Button



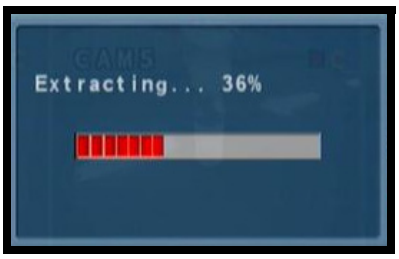
A Drive Usage report will be displayed:

- Amount of space (in MB) needed
- Start and End Times for Each Channel, with size of recordings (in MB)
- Size of the Log File

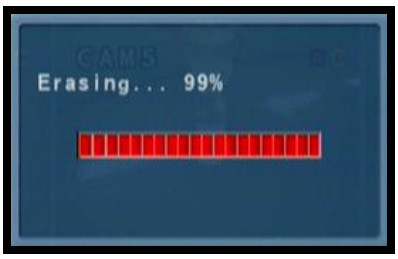
Select **OK** to begin the backup



The Writing status window displays the completion state of the Backup (in%)

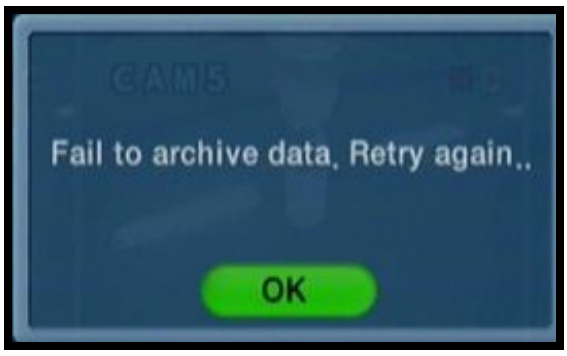


The Extracting status window displays the completion state of the Extraction of previously archived data (in%)

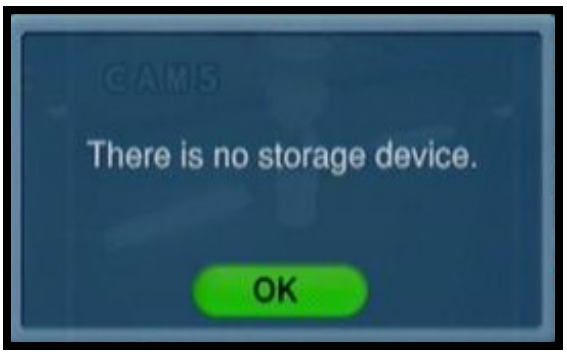


The Erasing status window displays the completion state of the Erasing of previously archived data (in%)

Error Messages



Error dialogue when the archive process fails.



Error dialogue displayed when the backup device (USB) is not detected

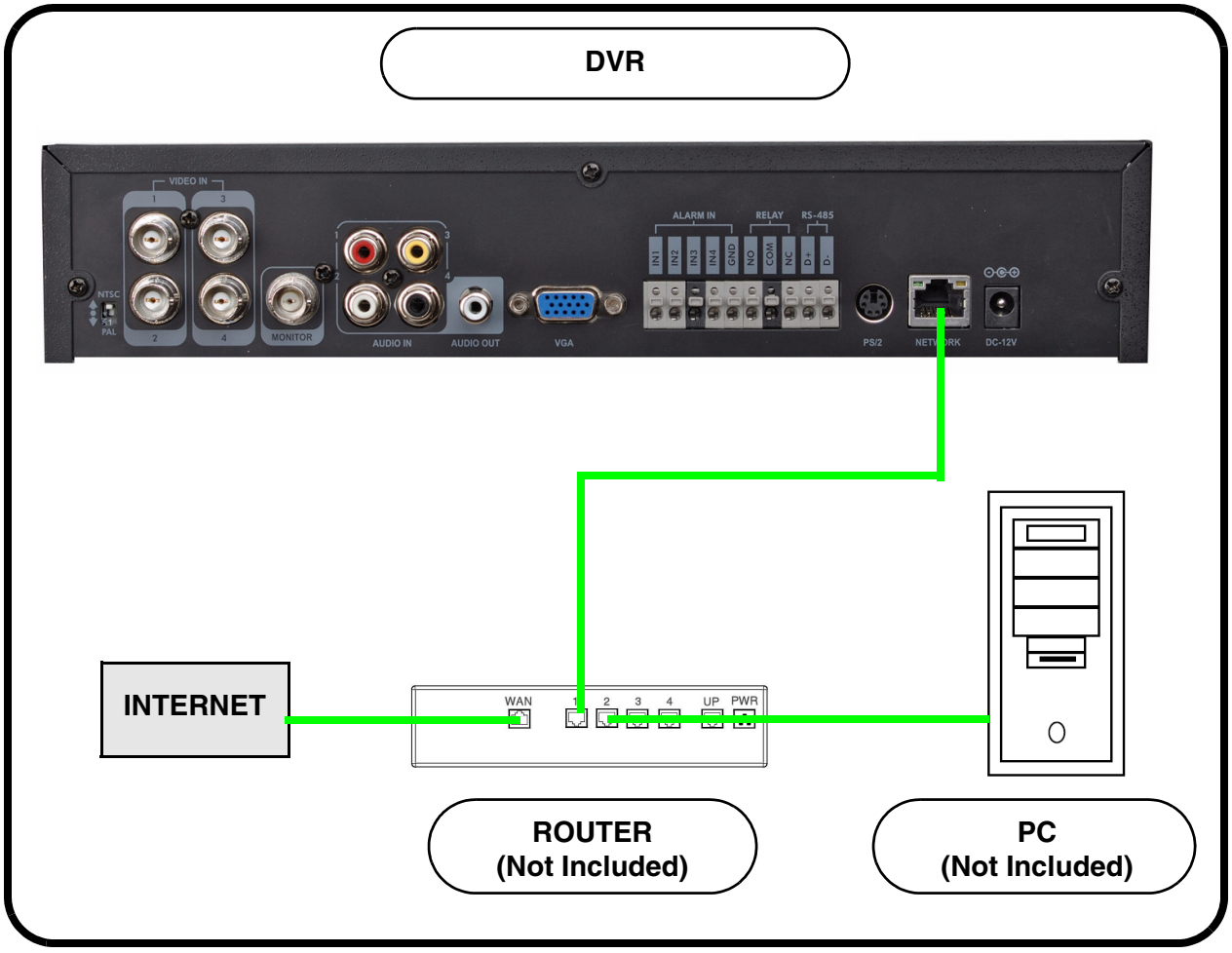
Network Connectivity Overview

The DVR can be remotely controlled using your existing network and the provided software.

1. Connect the DVR to the Router using an Ethernet Cable (not included). Power on the DVR.

NOTE: The DVR must be connected to the router prior to powering on the system. This allows the system to communicate on your network

2. Find the IP address of your DVR through the Menu System on the unit.
3. Set up a web account at **http://ddns.digimerge.net**.
4. Enable **PORT FORWARDING** on your Router. See “Router Port Forwarding” on page 44.
5. Install the Software on your PC. See the **Software Installation Guide** (provided with this System) for installation requirements and details on using the software.



IP & MAC Address

The IP & MAC Addresses are necessary for DDNS Setup (for remote access to the DVR).

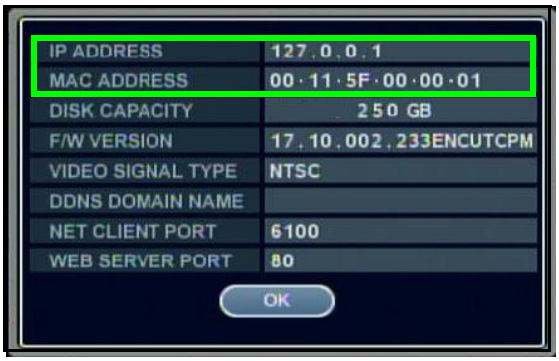
To Locate the System information, Press the ENTER button on the Front Panel or Remote Control while viewing the Cameras. The System Info window will be displayed.



- OR -

1. Press the Menu Button on the Front Panel or Remote Control to access the Menu. Select System Setup and press the Enter button.
2. Select SYSTEM and press the ENTER button.
3. Select the SYSTEM MANAGEMENT tab on the left-hand side.
4. Under System Information, select PRESS and press the Enter Button to display the System Information.





Finding Your External IP Address

You will need to have your External IP address to set up your **DDNS** account. One of the fastest ways to find this information is to use a third party website such as **http://www.showmyip.com**

Your IP address can also be found within your Router settings. Refer to your router user guide for further details.

Setting Up Your DDNS Account

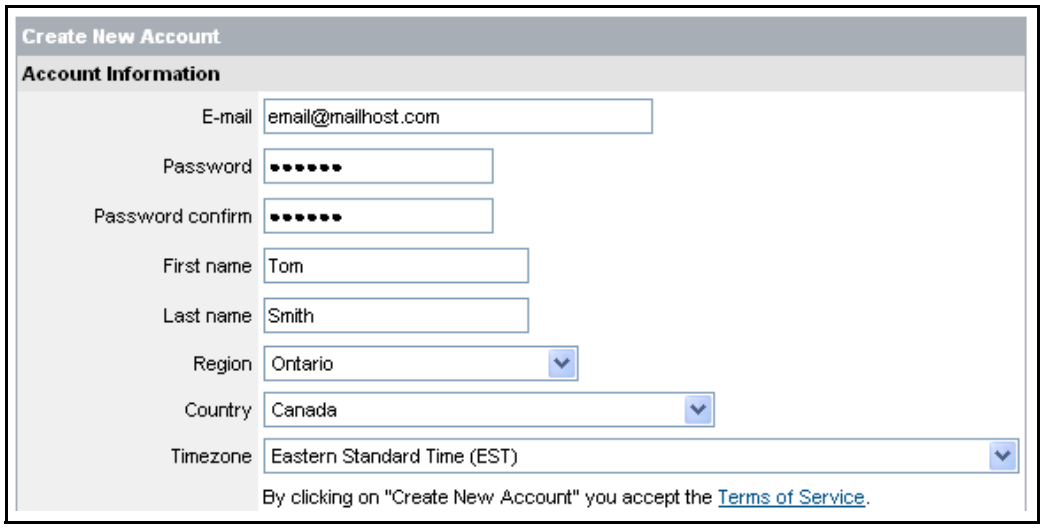
Digimerge offers a free DDNS service for use with your System. A DDNS account allows you to setup a web site address that points back to your Local Network. The following outlines how to set up your free DNS account.



1. Navigate to **http://ddns.digimerge.net**

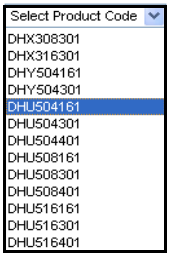
2. Select the **Create Account** option from the list on the left side of the screen.

3. Complete the **Account Information** fields with your personal information



4. Complete the **System Information** fields:

- **Product License**: Select your product model from the **Product License** drop down menu
- **<Product Code> - <MAC Address>**: Locate the MAC address of your (recorded while loading the System)
- **URL Request**: Choose a **URL** for your **DDNS** connection (i.e. your name, your company or business name, or anything of your choice.)





5. Click the **Create New Account** link at the bottom of the form to submit your request.

6. Your **Account** information will be sent to you at the **E-mail Address** you used in **Step 3**.

Service Provider: dns1.digimerge.net
Domain Name: tomsmith.digimerge.net
User ID: tomsmith1
Password: (your password)

You will need this information for remote access to your System. Record ***YOUR*** information below:

User Name:

_____ *

Domain Name:

Password:

* Only the first part of the Domain Name is required for setup on the System. If the full Domain sent is tomsmith.digimerge.net, the unit requires that only **tomsmith** be entered.

Router Port Forwarding

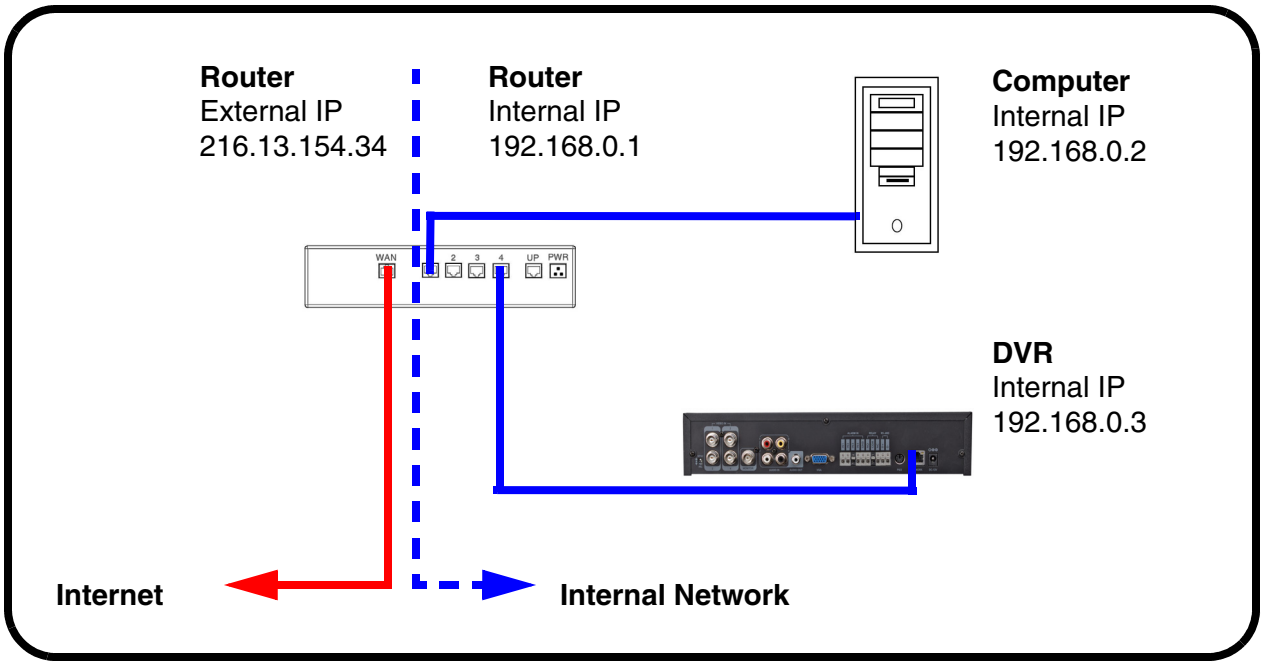
How do I enable Port Forwarding on my Router?

You will need to enable port forwarding on your Router to allow for external communications with your DVR for ports:

- **TCP/IP PORT 6100**
- **WEB PORT 80**

Computers, DVRs, and other devices inside your network can only communicate directly with each other within the internal network. Computers and systems outside your network cannot directly communicate with these devices. When a system on the internal network needs to send or receive information from a system outside the network (i.e. from the Internet), the information is sent to the Router.

NETWORK EXAMPLE



When a computer on the Internet needs to send data to your internal network, it sends this data to the external IP address of the Router. The Router then needs to decide where this data is to be sent to. This is where setting up Port Forwarding becomes important.

Port Forwarding tells the router which device on the internal network to send the data to. When you set up port forwarding on your Router, it takes the data from the external IP address:port number and sends that data to an internal IP address:port number (i.e **Router External IP 216.13.154.34:6100 to DVR Internal IP 192.168.0.3:6100**).

The instructions found online in the **Router Configuration Guide** will assist you in the port forwarding configurations for a selection of different router models.

DDNS SETUP

Once the DDNS settings have been configured online, the information must be entered on the DVR to allow for remote connection via the Digimerge Client Software (or through Internet Explorer):

1. Open the MENU and select SYSTEM SETUP.

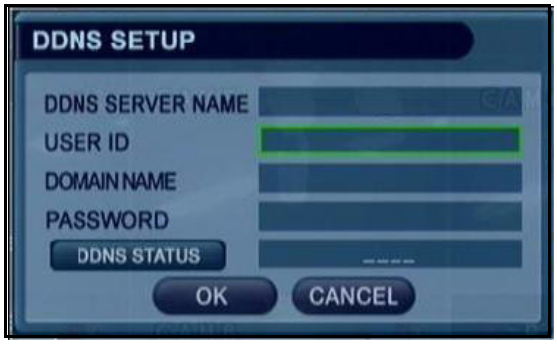
2. Select SYSTEM and press the ENTER button.



3. Select the **NETWORK** tab. Press the Enter button to access the Network settings. Select the DDNS SERVER option, and press the ENTER button to enter the **DDNS SETUP.**



4. Enter the information received in email (including the password). Select OK to save the settings.



Troubleshooting

When a malfunction occurs, it may not be serious and can be corrected easily. The following describes the most common problems and solutions. Please refer to the following before calling Digimerge Technical Support:

Problem:

DVR Unit is not receiving power, or is not powering up

Check:

- Confirm that all cables are connected correctly.
- Confirm that the power adaptor is securely connected to the back of the unit.
- Confirm that there is power at the outlet:
 - Connecting the power cable to another outlet
 - Test the outlet with another plugged device (such as an electric calculator or phone charger)
- If the unit is connected through a power bar or surge protector, try bypassing the bar and connecting the power directly to the wall outlet.
- Confirm that the unit is powered on (LED indicators on the front should be ON).

Problem:

The image on the DVR does appears, but does not have sound

Check:

- Check the VOLUME
- Check the AUDIO connections to the DVR
- Check the Configurations in the RECORDING MENU.

Problem:

There is no picture appearing on a Channel / Camera is not displaying

Check:

- Check the camera video cable and connections
- Disconnect and reconnect the cable at the DVR and at the Camera
- Try moving the camera to another channel or use another cable

Appendix 1: System Specifications

General Specifications

Video Standard	NTSC / PAL
Video Inputs	4 BNC @ 1.0Vp-p, CVBS, 75ohms
Video Outputs	1 x Monitor Out 1 x VGA (800x600 @60Hz)
Image Size	3-5 KB (352x240 NTSC, 352x288 PAL) 5-10 KB (704x240 NTSC, 704x288 PAL) 6-16 KB (704x480 NTSC, 704x576 PAL)
Operating System	Linux
Recording Speed	352x240 (NTSC) / 352x288 (PAL) 704x240 (NTSC) / 704x288 (PAL) 704x480 (NTSC) / 704x576 (PAL)
Audio Inputs	4 x Line In (RCA Sockets)
Audio Outputs	1 x Line Out (RCA Socket)
Audio	2-Way Audio Conference (via network)
Compression Standard	MPEG-4
Video Inputs	4 x 1Vp-p, CBVS, 75ohms, BNC, Looping Inputs
Hard Disk	3.5" SATA (up to 1 Terabyte)
Secondary Storage	External USB (flash drive, HDD), DVD-RW, Network
Backup File Formats	AVI and JPG
Record Scheduling	Daily, Weekly adjust specific HR. per channel
Playback	Single and Quad

Appendix 1: System Specification (cont'd.)

Alarm Specifications

Alarm Inputs	4 x TTL, programmable as NC or NO
Alarm Outputs	1 x relay with NO/NC Contact 30V DC/1A, 125 VAC/0.5A resistive
Activity Detection	11x8 Grid Sensitivity Levels: 10
Covert Camera Operation	Programmable
PTZ Control	RS-485
Remote Function	Live View, Live Recording, Search, Set-up, Back-up

Recording Specifications

Operation	Triplex
Recording Speed	352x240: 240/200 (NTSC/PAL) 704x240: 120/100 (NTSC/PAL) 704x480: 60/50 (NTSC/PAL)
Record Scheduling	Daily, Weekly, and Hour Specific
Pre / Post Alarm	Pre Alarm: 5 Seconds Post Alarm: 3 Minutes, programmable per camera
Event / Log Search	Up to 100,000 for user login/logout, configuration changes, remote access, and connects/ disconnects
Playback	Single or Quad Simultaneous

Network Specifications

Network Interface	8 Levels (56KB ~ 8MB)/sec.
Remote Access	View, Search, Record and Control via Software or Internet Explorer
Network Protocol	TCP/IP, DDNS and Web
Network Interface	10/100 Base-TX; RJ-45

Appendix 1: System Specification (cont'd.)

DVR Specifications

Supply Voltage	Input: 100 VAC - 240 VAC, 5A, 60/50Hz Output: 12V DC / 5 A
Power Consumption	Approx. 60 watts
Temperature Rating	41°F ~ 122°F 5°C ~ 50°C
Housing	Steel / Metal (DHU500R Series); Plastic Metal/ Plastic (DHU104 Series)
Color	Silver (DHU500R Series); Black & Burgundy (DHU104 Series)
Dimensions (WxDxH)	11.4" x 12.5" x 2.3" 290 mm x 318mm x 58mm
Weight	9.3 lbs 4.2 kg

As our products are subject to continuous improvement, Digimerge Technology Inc. and its subsidiaries reserve the right to modify product design, specifications and prices, without notice and without incurring any obligation.

E&OE

Appendix 2: Digimerge Client Software Requirements

The Digimerge Client software (included with the DVR) has the following installation requirements.

Minimum System Requirements:

Operating System	Windows 2000 Windows XP Home Edition Windows XP Professional
Processor	Pentium 4 - 1.5 GHz Processor (or equivalent)
Memory	256 MB RAM
Hard Drive	50 MB - Installation space required * Additional Hard Drive space required for recording. Recorded file size will vary depending on recording quality settings

Recommended System Requirements:

Operating System	Windows XP Home Edition Windows XP Professional
Processor	Pentium 4 / 3 GHz Processor (or equivalent)
Memory	1 GB RAM
Hard Drive	50 MB - Installation space required * Additional Hard Drive space required for recording. Recorded file size will vary depending on recording quality settings

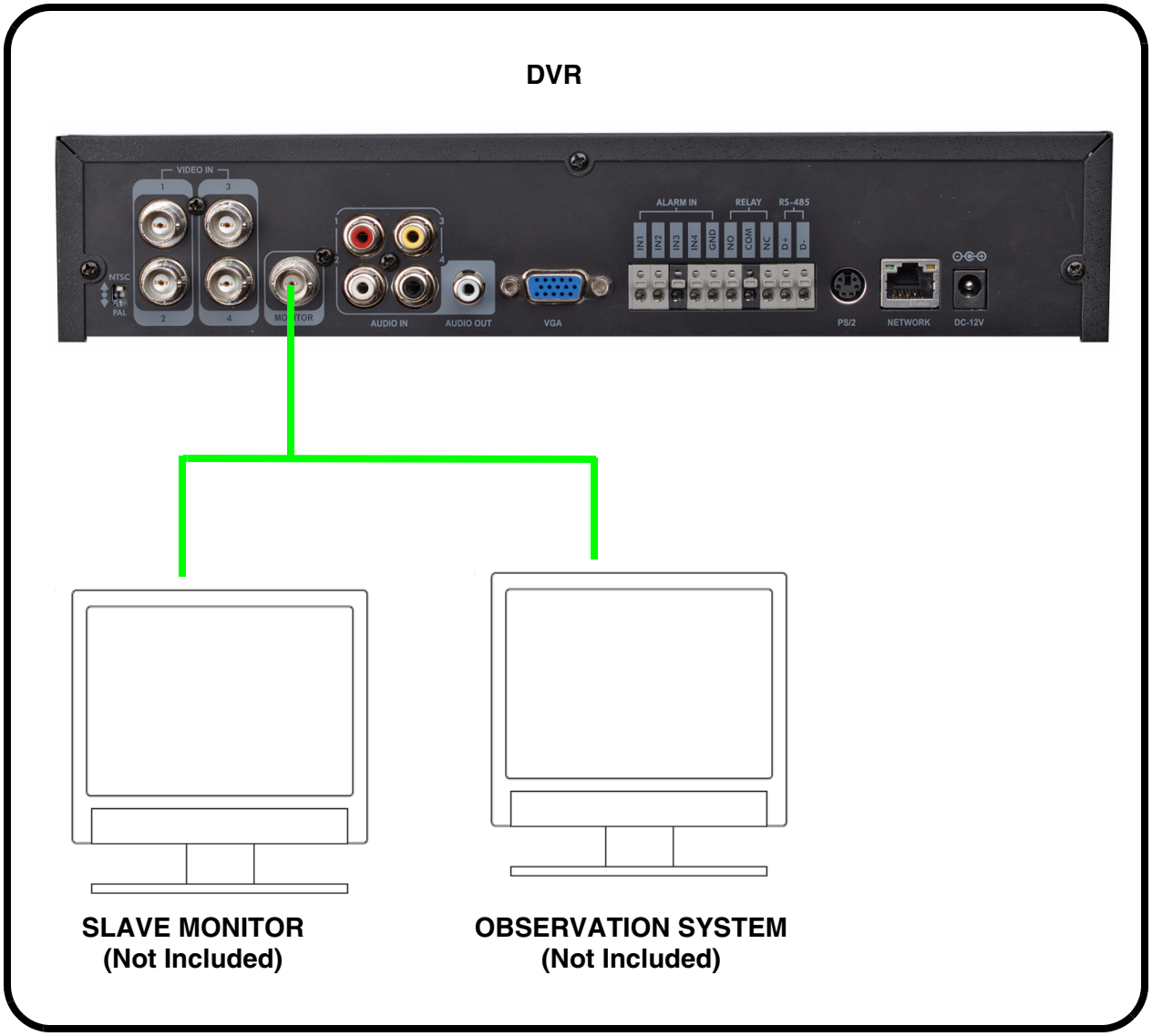
Please refer to the Digimerge Client Software User Guide included with your DVR for further details.

Visit the Digimerge support website at www.digimerge.com for information on Windows Vista compatibility.

Appendix 3: Monitor Out

Connect the system to an external monitor or to another DVR or observation system the MONITOR OUT port on the back of the DVR.

- **MONITOR OUT** - Displays exactly what is shown from the DVR (Camera View, Menus, etc.) to a TV or VCR.



Appendix 4: Connecting Motion/Alarm Devices

Motion detection and Alarm controls are enabled through the Menu system on the DVR. Additional motion sensor devices can be connected to the system (Motion Sensors, Door/ Window Sensors).

A motion detection or sensor unit can be used to send a signal to the DVR to begin camera viewing on the matching Video Channel (when enabled in the Menu):

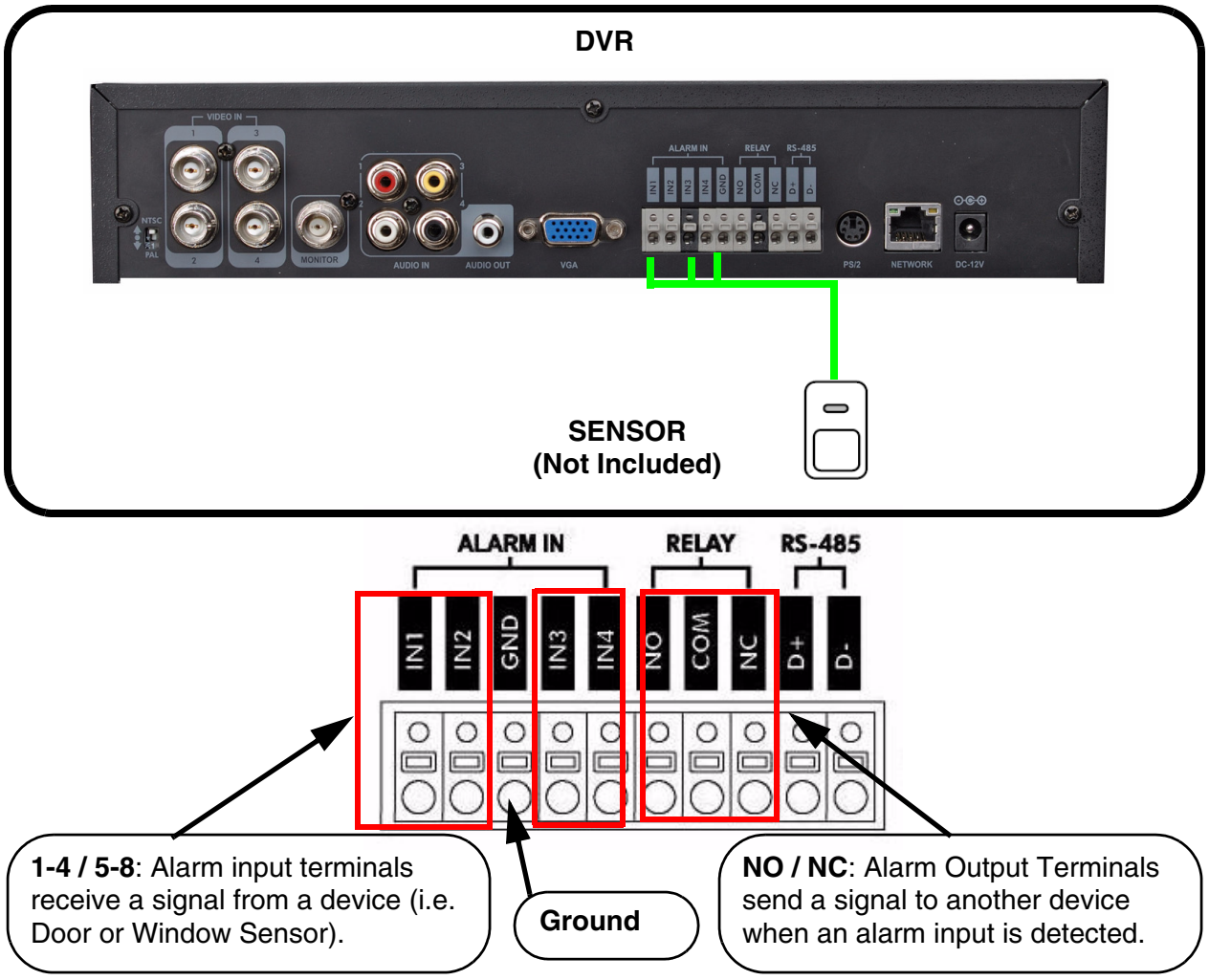
- Example: A Window sensor unit has been installed on Alarm Block port #4. When this sensor is activated, the camera on DIN or BNC VIDEO port #4 will become active (if enabled in the MENU on the DVR)

Installing a Sensor

1. Connect the GROUND Cable to the GND port on the Alarm Block on the DVR

2. Connect the SIGNAL Cable to a numbered port.

To start ALARM RECORDING on the System, refer to the Menu Configuration section of this manual.

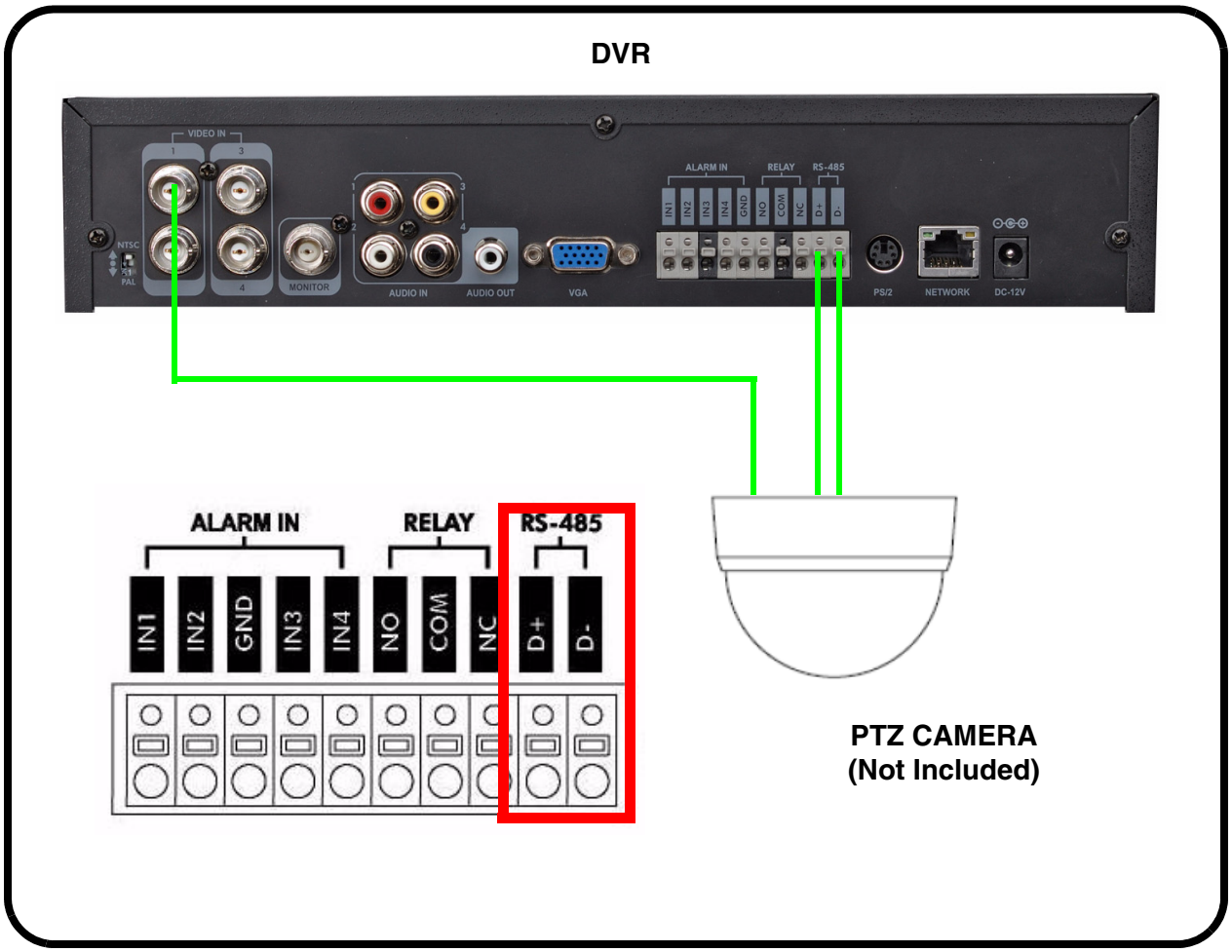


Appendix 5: Connecting a PTZ Camera

PTZ Cameras (not included with this system) can be connected to the PTZ Control Block on the back panel of the System. The PTZ Controls are enabled through the Menu system on the DVR. Additional PTZ Cameras are available at www.digimerge.com

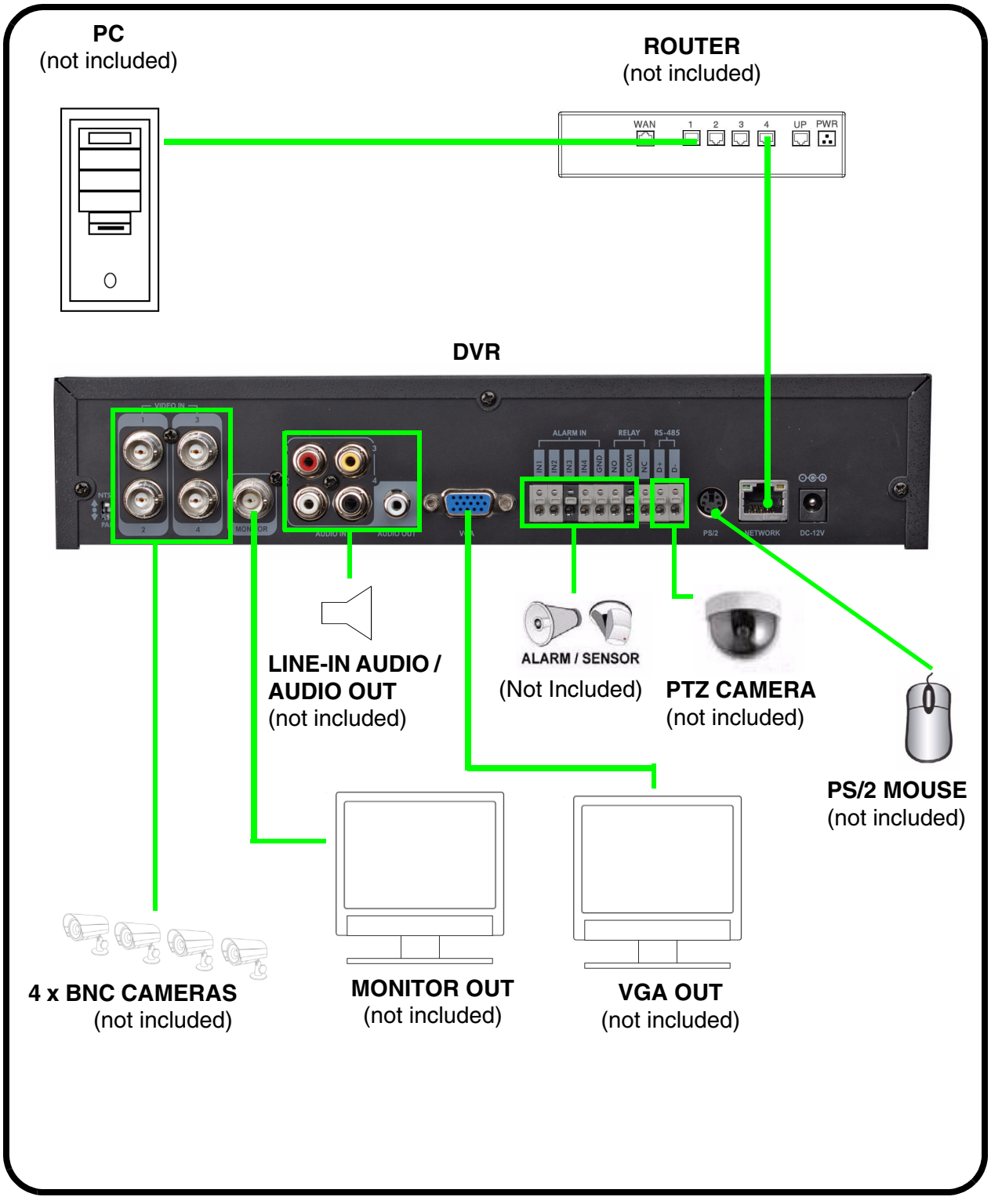
Installing a PTZ (RS-445 Type) PTZ Camera:

1. Connect the Transmit Cable to the D+ port on the PTZ Control Block on the DVR.
2. Connect the Receive Cable to the D- port on the PTZ Control Block on the DVR.
3. Connect the Camera to BNC Channel 1 (DIN Channel 1 must be empty).
4. Configure PTZ Menu options. The PTZ Camera Settings will depend on the Type of Camera - refer to the specific Camera Manual for your brand and model of PTZ Camera.



Appendix 6: Full Connectivity Diagram

The following diagram outlines a general set of connections available with the DVR.

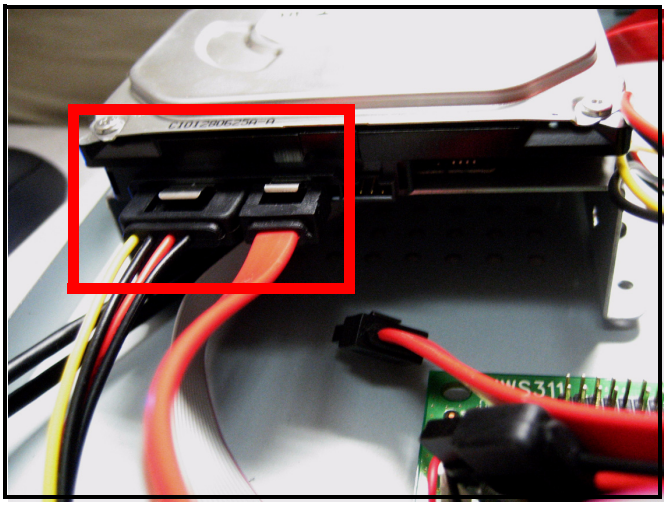


Appendix 7: Replacing the Hard Drive

The system comes with a pre-installed, security-grade 3.5" SATA Hard Drive, however the unit will work with a replacement single SATA Hard Drive (up to 1 TB).

NOTE: Make sure that the system is **OFF** and the power cable has been disconnected before changing the Hard Drive.

Replacing the Hard Drive



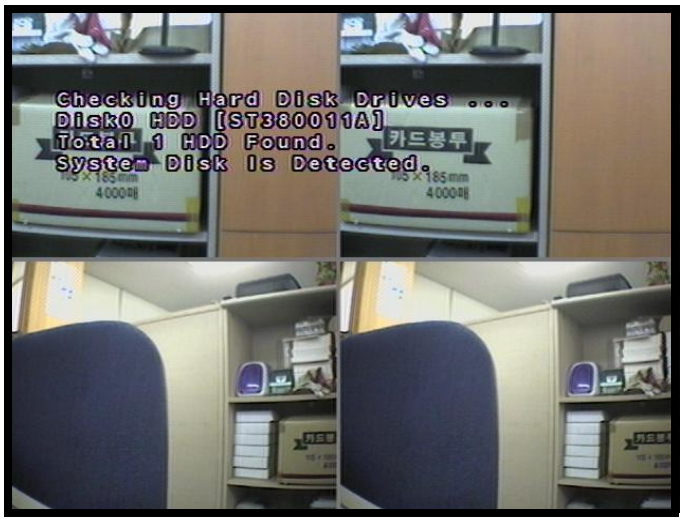
Press the metal clip and gently pull each cable.

To replace the current hard drive:

1. Remove the four screws on the side panles and three screws on the rear panel. Carefully remove the metal housing.
2. Disconnect the power and data cables from the hard drive. Press the metal clip on each cable and gently pull.
3. Remove the four screws holding the hard drive into the drive bracket.
4. Place the new drive on the drive bracket and replace the four screws. Make sure the connector pins are facing toward the cables.
5. Reconnect the power and data cables. The metal clip on each cable should be facing up. Press the metal clip and gently push the cable until you hear a “click.”
6. Replace the metal housing and secure with the three screws on the rear panel and four screws on the side panels.

Formatting the New Hard Drive

The new hard drive *must* be formatted.



If a new **HARD DRIVE** is detected, the system will prompt you to FORMAT the drive. If you do not choose to format the HARD DRIVE, the drive will not be detected by the system.

To format the new hard drive:

1. From the system prompt, press the **Right Arrow key** on the front panel to select **YES**.
2. Press the **Enter** key on the front panel.

 Note: If you choose to FORMAT a drive in this way, the drive will no longer be readable by a regular PC without using the **HARD DRIVE VIEWER** software included on the CD provided with this unit.

NOTE: Do NOT turn off the System while the drive is formatting. This can cause problems with the Hard Drive.

Appendix 8: Using the Storage Calculator

The Storage Calculator application is used to calculate the amount of recording time available on your Hard Drive, based on the System Recording Settings. This application is located on the Software Installation CD (provided with your System)

1. Select the settings to reflect the options you have chosen on your System:

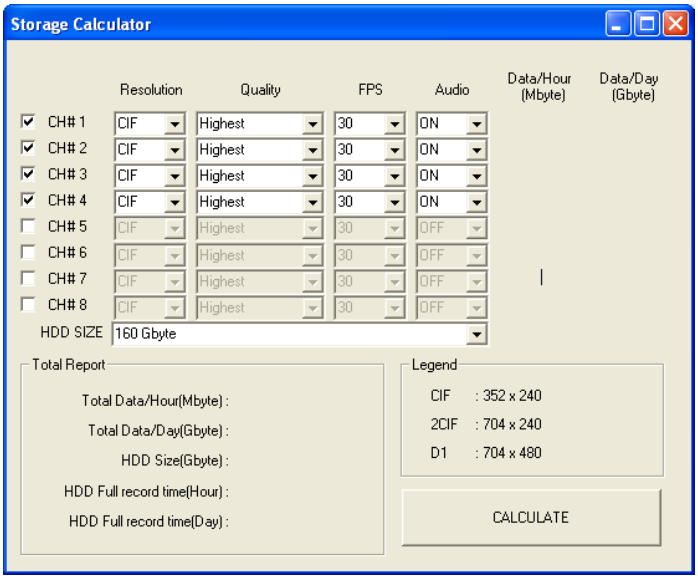
CH1~CH4 - Select the channels to include in the Recording Calculation

Resolution - Set the recording Resolution to CIF (352x240), 2CIF (704x240) or D1 (704x480)

Quality - Set the recording Quality to Low, Standard, High or Highest.

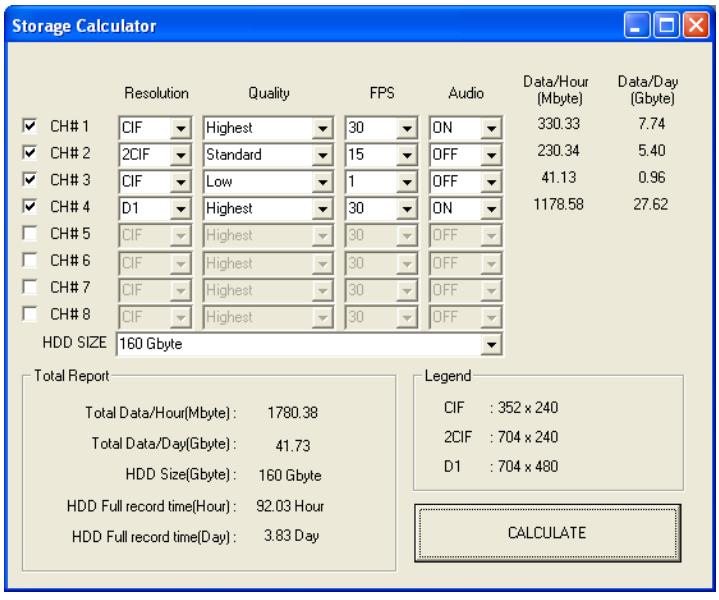
FPS - Set the Frames Per Second for the recording to 1, 2, 4, 8, 15 or 30 FPS.

HDD Size - Select the size of the System Hard Drive.



Main Screen - The Software loads with the following defaul selected. Use the dropdown selections to change the options to reflect your System settings.

2. Click **CALCULATE**. The Software will use all configurations to provide recording data specific to your System.

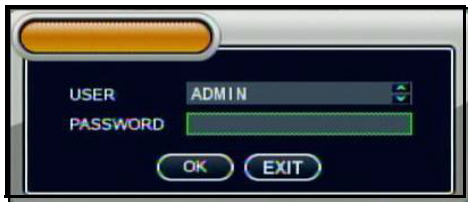


Example of Recording Time Calculations

Appendix 9: System Setup Tips

There are several tips outlined below that will assist you in setting up your system:

Navigating within the System Menu



- Open the **MENU** screen by pressing the **MENU** button. Enter the password if required.
- The Menu contains the following options: **Search**, **Archiving**, **Record Start (Panic Recording)**, **Sequence**, **PTZ**, **System Setup**, **Record Setup**, **Logoff**, and **Shutdown**.
- Scroll through the options by pressing the **UP**, **DOWN** buttons on the Front Panel or Remote Control.
- To enter a sub-menu, select the option and press the **ENTER** button. To exit a **SUBMENU**, press the **RETURN** button.
- To exit the **MENU**, press the **RETURN** button.



Changing the Date and Time

Setting the correct date and time for your system is important. Once the date and time have been set correctly, it is highly recommended that you format your Hard Drive.

1. Open the MENU by pressing the MENU button on the front panel of the system (or on the Remote Control). Select the SYSTEM SETUP Option and press the ENTER button.
2. Select SYSTEM and press the ENTER button.



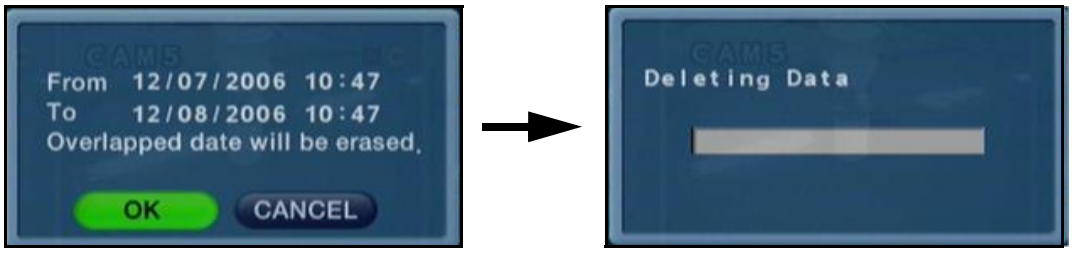
3. Select the DATE AND TIME Menu. Change the settings by navigating with the UP/ DOWN/LEFT and RIGHT arrow keys. Set the following based on your local Time (and Timezone), and set the current date for the system.

- **Date/Time** - Sets the current system Date and Time.*
- **Date Format** - Sets the Date Display format (MM-DD-YYYY, YYYY-MM-DD, etc.).
- **Time Format** - Sets the Time Display format to either 12 or 24 hour display.
- **Network Time Server Setup** - Synchronizes the system to the specified remote time server. Select the **SYNC** button to connect to the remote server and synchronize the time. (may also use a time server of the users choice).



- **Timezone Setup** - Selections for the local Time Zone (i.e. EST, CST, PST). The **DST** (Daylight Savings Time) can be set to ON/OFF.

*** NOTE:** If the Date/Time is set into the past, a message will appear warning that Overlapped date(s) will be erased.
** MAKE SURE THAT THE DATE AND TIME ARE SET PRIOR TO RECORDING! **



Formatting the Hard Drive

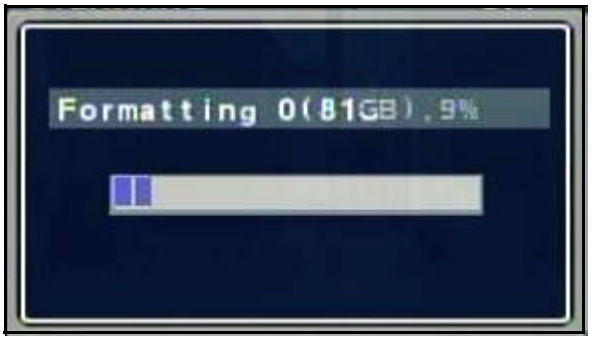
Formatting the hard drive after changing the date, and before beginning the recording of YOUR data is recommended, as the system is set to Automatically start recording when powered on (continuous recording setting).

NOTE: Formatting the Hard Drive will erase any previously recorded data. This will NOT affect your system configurations.

1. From the system MENU, select SYSTEM SETUP and press the ENTER button.
2. Select DISK MANAGEMENT and press the ENTER button.
3. Under FORMAT, select the START and press the ENTER button.
4. You will be prompted to enter the **ADMIN PASSWORD.** Once the password is accepted, all Hard Drive data will be erased.
 - A warning message will be displayed with the prompt 'All Recorded Data will be erased.'
5. Select YES to erase the data, or NO to return without erasing the Hard Drive.







Formatting Status Indicator Window: Once the format is complete, the system will return to the Disk Manage Menu.

Camera Setup

Each camera should be assigned a name that corresponds to its use (i.e. Dock1, BackDoor, Cash3, etc.). This name is displayed onscreen, and helps to identify the camera location easily.



1. Enter MENU mode by pressing the MENU button on the front panel of the system (or on the Remote Control). Select the SYSTEM SETUP Option.

2. Select the CAMERA menu from the MAIN menu. Navigate using the up and down arrows on the front panel (or remote control). Highlight the selection in Green, and press the ENTER button to enter the CAMERA Menu.



3. Select the CAMERA TITLE Menu. Change the settings by navigating with the UP/DOWN/LEFT and RIGHT arrow keys.



- **CAM #** - Indicates the Camera Number (corresponds to the BNC connection port on the back of the system).
- **Covert** - Turns the onscreen display of the Camera ON/OFF. Covert Cameras continue to record, however the camera is not displayed onscreen. This feature is commonly used in situations where the Monitor is located in a public area, and a camera should not be displayed (i.e. Located in a Cash Count room, or directed at a Cash Register).
- **Title** - Sets the name for the individual camera (0~9, A~Z) up to # characters, by using the Virtual Keyboard:
- **Virtual Keyboard** - Appears when the Camera Title change is selected. Navigate with the arrow keys, and press ENTER to select a Number or Letter.
- **APPLY** - Saves the Title change.
- **PREVIOUS** - Moves to the previous camera in the list

Backing up your System Configurations

it is recommended to back up your system configurations to a Memory Stick. Configuring your system to meet your specific needs can be time consuming - having a backup of your settings will allow you to reset your unit with your personalized settings in the event of an unwanted change.

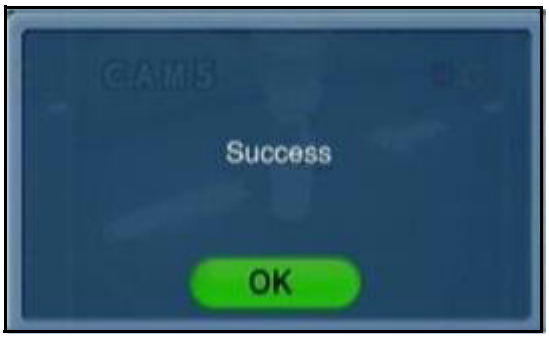


1. Enter MENU mode by pressing the MENU button on the front panel of the system (or on the Remote Control). Select the SYSTEM SETUP Option.

2. Select the SYSTEM MANAGEMENT menu from the MAIN menu. Navigate using the up and down arrows on the front panel (or remote control). Highlight the selection in Green, and press the ENTER button to enter the SYSTEM MANAGEMENT Menu.

3. Navigate to the System Data option - the System settings can be saved to a USB memory stick:

 - Insert the Memory stick into the System and select the Save option to save settings:
 - A Success message indicates that the backup was completed.
 - If the device is not detected, a message will indicate that No storage device was found.
 - To load your User Settings, Insert the Memory stick into the System and select the Load option to restore settings.
 - System Backup is recommended after initial setup and installation is complete.





NOTE: Make sure to store your USB flash drive in a safe place.

Appendix 10: Using Listen-In Audio

How do I enable Listen-In Audio, and how do I set the Listen-in channel?

Listen-In Audio is the ability to listen to live audio on ONE channel at a time, between channels 1~4. To listen to live audio on a channel:



1. Open the system MENU, select SYSTEM SETUP and press the ENTER button.
2. Select SOUND and press the ENTER button.
3. Under AUDIO, configure the following options:
 - **Live Audio** - Turns Live System Audio (from the Audio on the terminal) to ON/OFF.
 - **Audio Monitoring Channel** - Select the channel for Listen-in Audio.
 - **Network Audio TX** - Turn network audio transmission ON/OFF.
 - **Network Audio RX** - Turn network audio receiving ON/OFF.



NOTE: Once the LIVE AUDIO Feature has been set to ON, the Remote Control can be used to select the Listen-In Audio Channel. Press the AUDIO SEL button on the Remote Control to switch between Channels 1~4. An Audio Icon will appear onscreen next to the current Live Audio Channel.



Appendix 11: Playing Recorded Video Data

Search mode allows you to locate previously recorded video by Date and Time, or by Event Type.

- Press the Search Button on the front panel or Remote Control
- Enter the User Name and Password (if required).
- Use the Left / Right arrows on the Front Panel or Remote Control to switch between the Search By Time and Search By Event screens.



Search By Time

Searches the system based on date and time.

- Press the Enter button to access the Calendar (on the left side of the screen)
- Navigate within the calendar using the Arrow Keys on the front panel or remote control.
- Once the date has been located, press the Enter button to accept the date, and to access the Time Search (on the right side of the screen).
- Press and Hold the arrow keys to select the Time (increments of 1 minute). Pressing the button without holding will increment 15 minutes.
- Press the Enter button to start the playback. Press the Return button to stop playback and return to the Search By Time screen.

NOTE: The unit will continue to record data while in Playback Mode.



Any days highlighted with GREEN indicate that there is recorded video data.



The Date and Time will be displayed at the bottom of the screen. A playback icon will appear indicating that the unit is in Playback mode.

Search By Event

Searches the system based on Event Type (Alarm, Motion, Continuous or System).



- Press the right arrow button on the front panel or remote control to access the Search By Event screen.
- Select From and To dates, Events (Alarm, Continuous, Motion and Other) and Cameras
- Navigate within the options using the Arrow Keys on the front panel or remote control. Press the Enter button to select or deselect options (Note: Multiple event types can be selected).
- Navigate to the Start button at the bottom of the screen and press the Enter button. A listing of events will be displayed.
- Navigate to an event, and press the Enter button to start the playback. Press the Return button to stop the playback.and return to the Event Search screen.

Appendix 12: Recording Modes

The system is set to automatically start recording when powered on. You may wish to change these settings to better suit your security needs. These settings can be changed for an individual camera on one time block, or can be set for multiple cameras for multiple time blocks.

Setting An Individual Time Block

1. Enter MENU mode by pressing the MENU button on the front panel of the system (or on the Remote Control). Select the RECORD MENU Option.

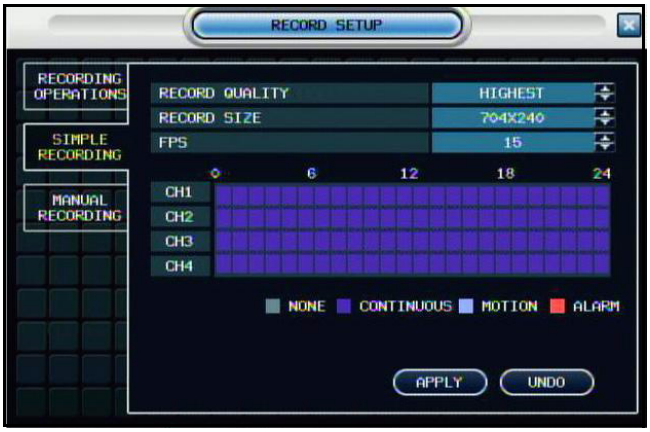
2. Select the SIMPLE RECORDING MODE menu. Navigate using the up and down arrows on the front panel (or remote control). Navigate using the arrow keys

3. Use the navigation arrows on the remote control to select the Time Grid and press the ENTER button. Once selected, the Time Grid is highlighted in light blue.

4. Use the navigation arrows to select an individual time block. Selected arrows are highlighted in light blue.

5. Press the ENTER button. The selected time block will be highlighted ORANGE.

6. Press ENTER button again to access the Configuration Menu. Select CONTINUOUS, MOTION or ALARM by pressing the UP and DOWN arrows. Press ENTER to check the boxes. Select OK and press the ENTER button to save your settings or select CANCEL to exit without saving.



Add recording events: Continuous (purple), Motion (light blue), Motion (red), or None (grey).







Setting Multiple Time Blocks

1. Enter MENU mode by pressing the MENU button on the front panel of the system (or on the Remote Control). Select the RECORD MENU Option.

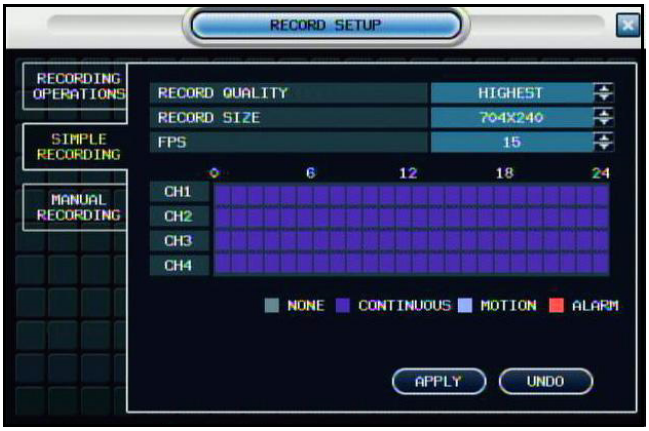
2. Select the SIMPLE RECORDING MODE menu. Navigate using the up and down arrows on the front panel (or remote control). Navigate using the arrow keys

3. Use the navigation arrows on the remote control to select the Time Grid and press the ENTER button. Once selected, the Time Grid is highlighted in light blue.

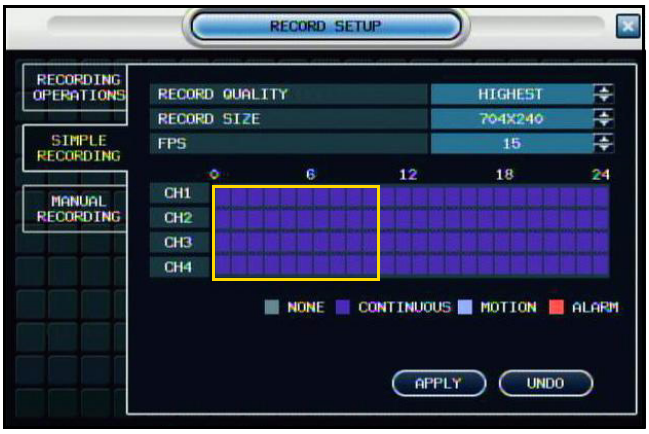
4. Use the navigation arrows to select an individual time block. Selected arrows are highlighted in light blue.

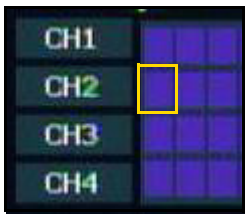
5. Press the ENTER button. The selected time block will be highlighted ORANGE. Press the UP, DOWN, LEFT and RIGHT Arrow keys to highlight multiple time blocks.

6. Press ENTER button again to access the Configuration Menu. Select CONTINUOUS, MOTION or ALARM by pressing the UP and DOWN arrows. Press ENTER to check the boxes. Select OK and press the ENTER button to save your settings or select CANCEL to exit without saving.



Add recording events: Continuous (purple), Motion (light blue), Motion (red), or None (grey).





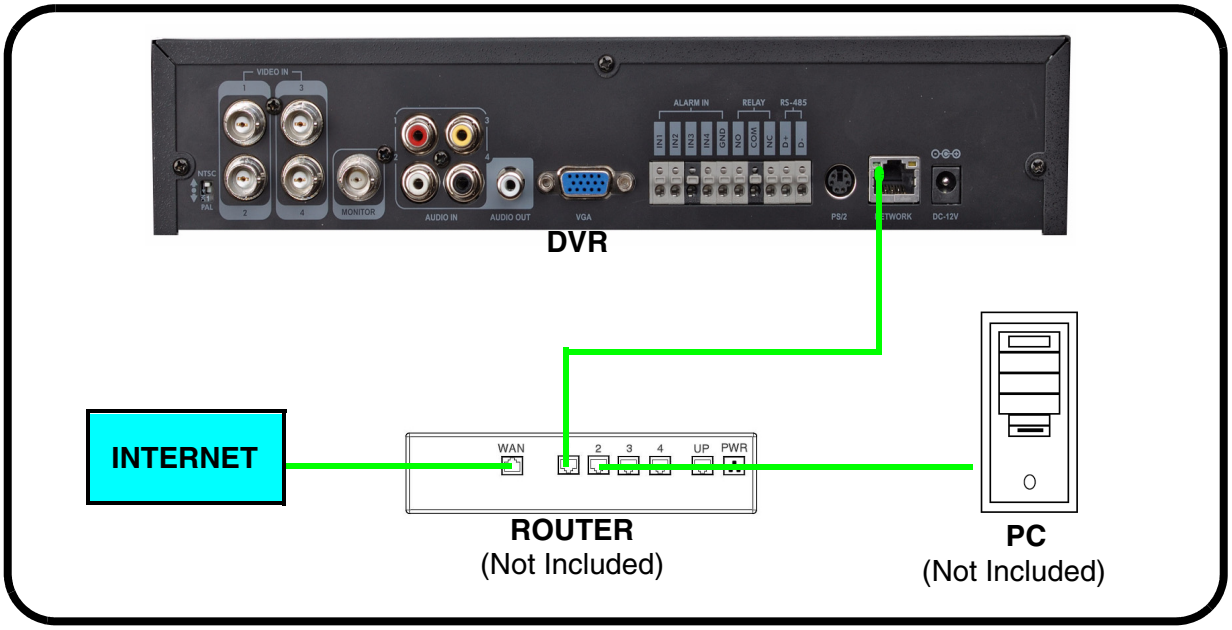


Appendix 13: Setting Up Remote Viewing

Setting up the Remote Viewing Feature requires several steps. Networking skills are required to correctly configure the remote viewing functions.

What do I need?

- The DVR System
- A PC with the installed DigiClient software (refer to the DigiClient Software Manual for installation instructions)
- A router (not provided with the system) and High Speed Cable or DSL Internet Connectivity (for remote viewing outside your network)



Network Setup / Remote Access Overview

To setup remote viewing:

1. With the system powered off, connect the system to the router using the included Ethernet cable.
2. Power the system on. You must connect the system to the router prior to turning on the system. This allows the system and router to communicate over the network.
3. Press and hold the Enter button on the front panel to find your system's IP address.
4. Enable Port Forwarding on your router. Refer to the included Router Guide and Basics of Remote Video Access Guide for further assistance with your specific network setup and hardware.
5. Setup an account at http://ddns.digimerge.net

IP & MAC Address



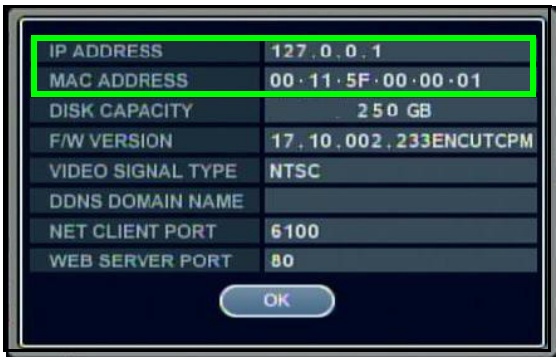
The IP & MAC Addresses are necessary for DDNS Setup (for remote access to the DVR).

To Locate the System information, Press the ENTER button on the Front Panel or Remote Control while viewing the Cameras. The System Info window will be displayed.

- OR -

1. Press the Menu Button on the Front Panel or Remote Control to access the Menu. Select System Setup and press the Enter button.
2. Select SYSTEM and press the ENTER button.
3. Select the SYSTEM MANAGEMENT tab on the left-hand side.
4. Under System Information, select PRESS and press the Enter Button to display the System Information.





Finding Your External IP Address

You will need to have your External IP address to set up your **DDNS** account. One of the fastest ways to find this information is to use a third party website such as **http://www.showmyip.com**

Your IP address can also be found within your Router settings. Refer to your router user guide for further details.

Setting Up Your DDNS Account

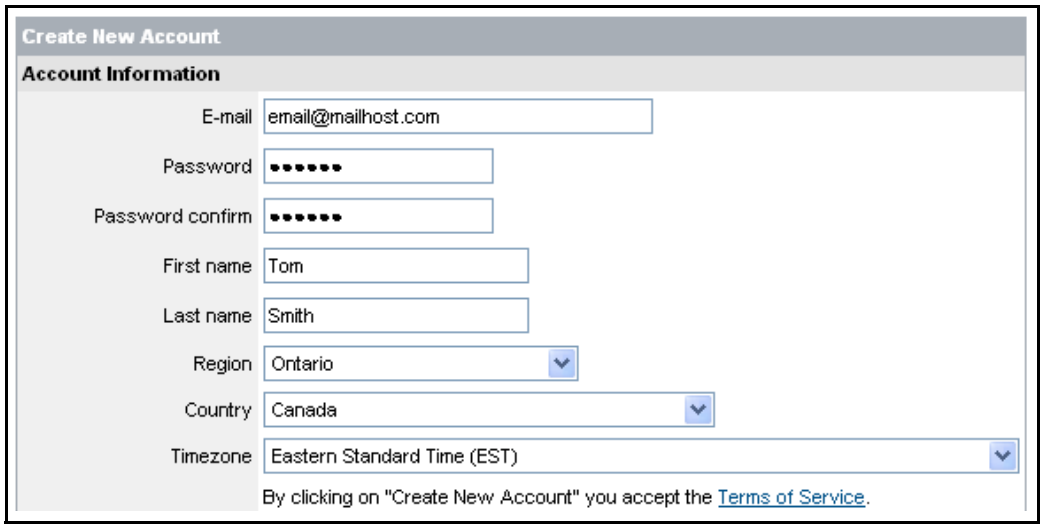
Digimerge offers a free DDNS service for use with your System. A DDNS account allows you to setup a web site address that points back to your Local Network. The following outlines how to set up your free DNS account.



1. Navigate to **http://ddns.digimerge.net**

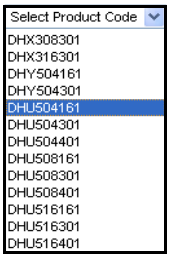
2. Select the **Create Account** option from the list on the left side of the screen.

3. Complete the **Account Information** fields with your personal information



4. Complete the **System Information** fields:

- **Product License**: Select your product model from the **Product License** drop down menu
- **<Product Code> - <MAC Address>**: Locate the MAC address of your (recorded while loading the System)
- **URL Request**: Choose a **URL** for your **DDNS** connection (i.e. your name, your company or business name, or anything of your choice.)





5. Click the **Create New Account** link at the bottom of the form to submit your request.

6. Your **Account** information will be sent to you at the **E-mail Address** you used in **Step 3**.

Service Provider: dns1.digimerge.net
Domain Name: tomsmith.digimerge.net
User ID: tomsmith1
Password: (your password)

You will need this information for remote access to your System. Record ***YOUR*** information below:

User Name:

_____ *

Domain Name:

Password:

* Only the first part of the Domain Name is required for setup on the System. If the full Domain sent is tomsmith.digimerge.net, the unit requires that only **tomsmith** be entered.

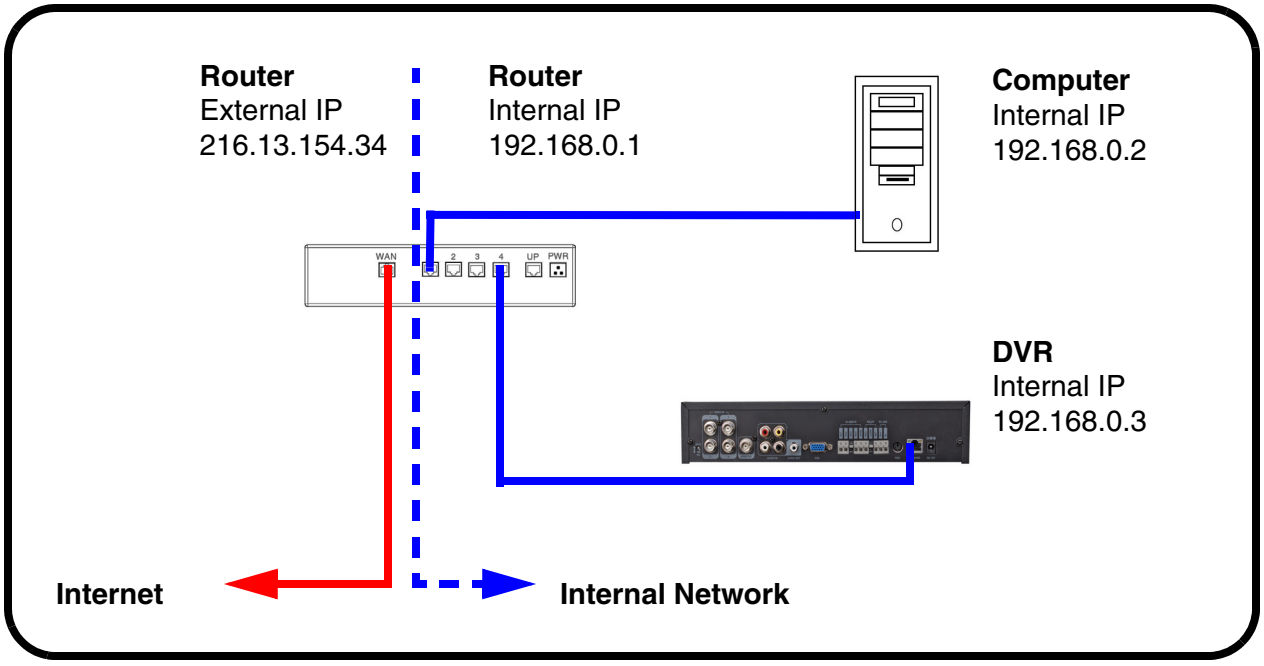
Network - Router Port Forwarding

You will need to enable port forwarding on your Router to allow for external communications with your DVR for ports:

- **TCP/IP PORT 6100**
- **WEB PORT 80**

Computers, DVRs, and other devices inside your network can only communicate directly with each other within the internal network. Computers and systems outside your network cannot directly communicate with these devices. When a system on the internal network needs to send or receive information from a system outside the network (i.e. from the Internet), the information is sent to the Router.

NETWORK EXAMPLE



When a computer on the Internet needs to send data to your internal network, it sends this data to the external IP address of the Router. The Router then needs to decide where this data is to be sent to. This is where setting up Port Forwarding becomes important.

Port Forwarding tells the router which device on the internal network to send the data to. When you set up port forwarding on your Router, it takes the data from the external IP address:port number and sends that data to an internal IP address:port number (i.e **Router External IP 216.13.154.34:6100 to DVR Internal IP 192.168.0.3:6100**).

DDNS SETUP

Once the DDNS settings have been configured online, the information must be entered on the DVR to allow for remote connection via the Digimerge Client Software (or through Internet Explorer):

1. Open the MENU and select SYSTEM SETUP.

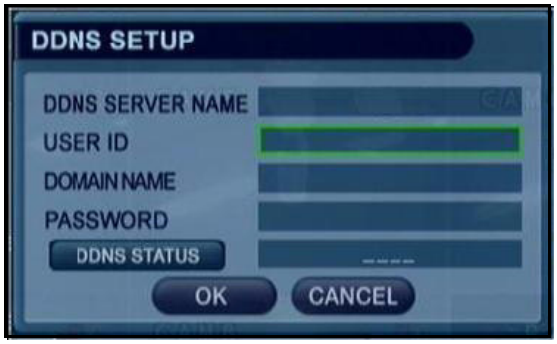
2. Select SYSTEM and press the ENTER button.



3. Select the **NETWORK** tab. Press the Enter button to access the Network settings. Select the DDNS SERVER option, and press the ENTER button to enter the **DDNS SETUP.**



4. Enter the information received in email (including the password). Select OK to save the settings.



Digimerge NetViewer Software - Connection Manager



The Connection Manager contains the setup information to allow the user to remotely connect to the DVR.

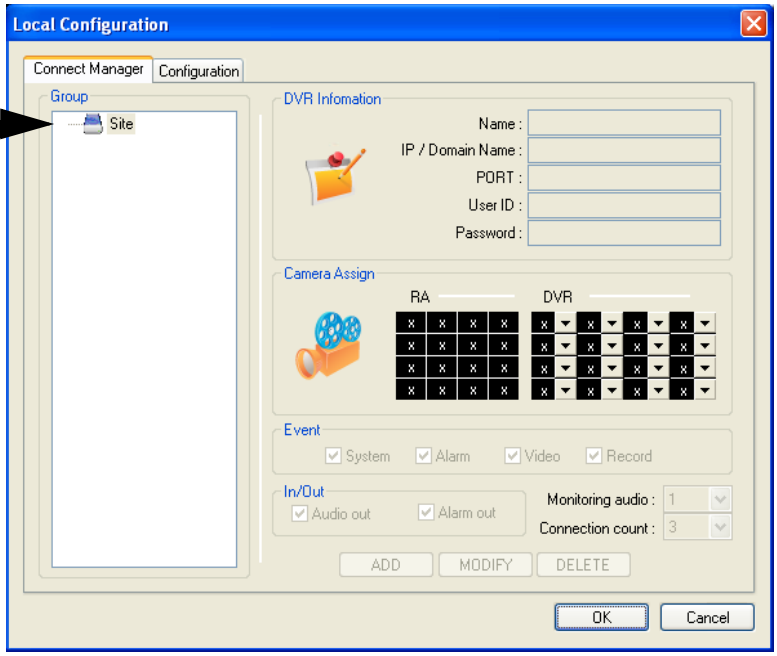
Adding a Group

Group - Right click on 'Site' to add a New Group.

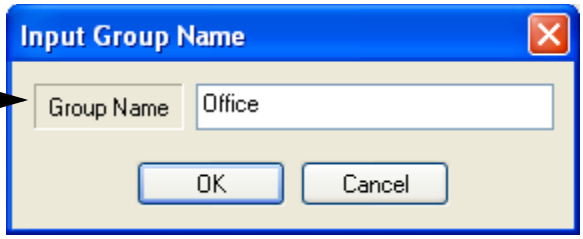
A group can represent one or more DVRs.

For Example, you may have more than one system in your office, so would name your group 'OFFICE'.

Each individual unit can then be configured separately for connection.



Enter a name for the Group.



Adding a Site (Individual Unit Configuration)

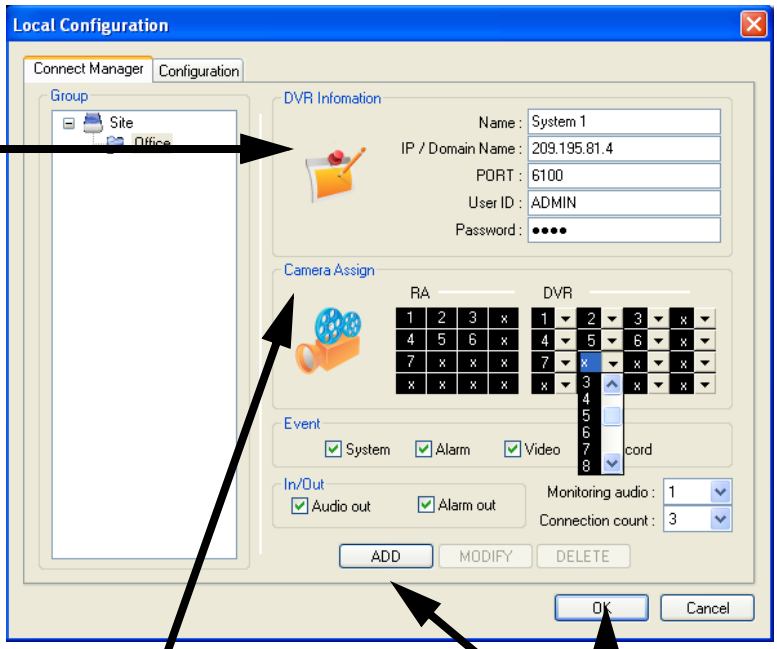
DVR Information - Enter the information specific to the unit:
- **Name** - Enter a name for the unit.

- **IP / Domain Name** - Enter the IP address or Domain Name for the System. This will vary depending on setup (Internal Network Connection or External Remote access through the Internet).

- **Port** - Set to 6100 by default.

- **User ID** - Enter the USER ID to connect to the system (the USER ID is configured on the System - i.e. ADMIN - case sensitive).

- **Password** - The password used to access the System (i.e. The ADMIN password is set to 1234 by default).



Camera Assign - Set each camera to a portion of the 9-view window by using the drop down menu selections.

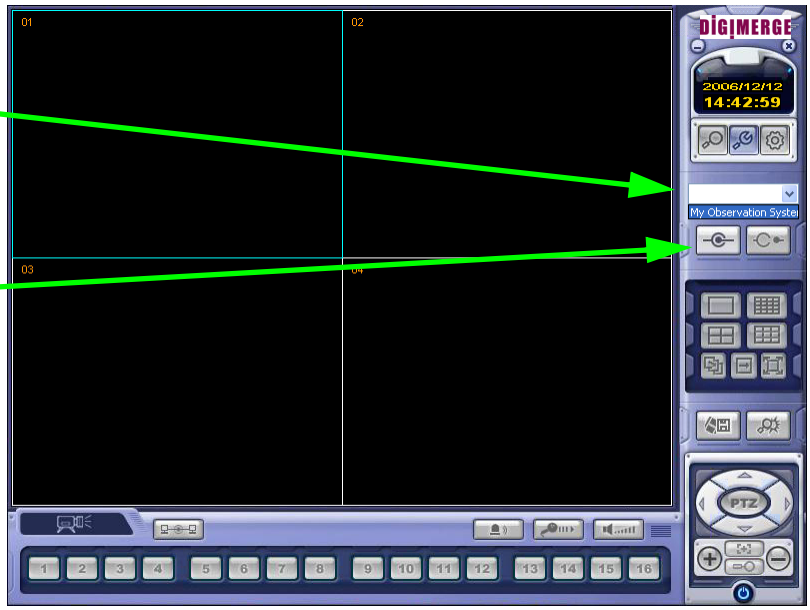
ADD Button - Adds the site to the Group.
OK Button - Accepts the changes and Closes the configuration Window

Digimerge NetViewer Software - Remote Connection

Once the site setup profile has been created, a connection can then be made to the DVR:

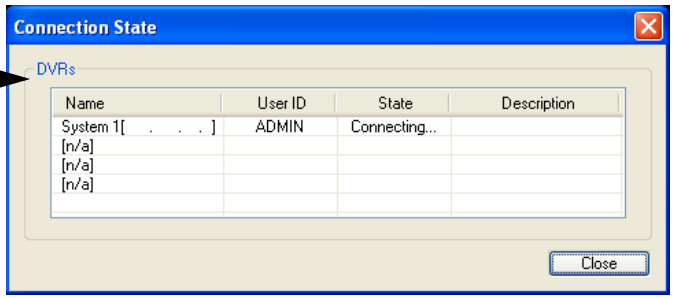
1. Select the Site profile from the Dropdown List.

2. Press the CONNECT button.

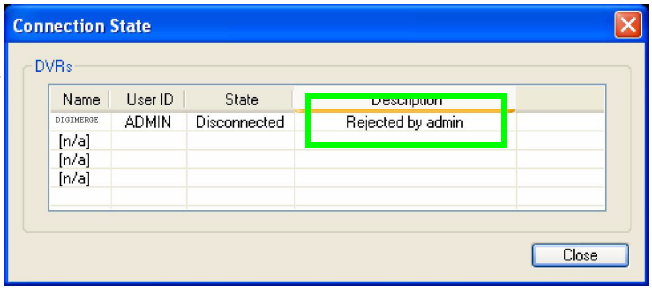


The Connection Status window displays the state of the connection.

Once a successful connection to the System has been made, the black screen view will switch to Live Camera View mode.



NOTE: If another user is connected to the System using the same credentials (i.e ADMIN), the connection will be rejected.



LIMITED WARRANTY

Digimerge Digital Video Recorder (DVR) – 5/3/1 Year Limited Hardware Warranty

Updated 08.12.08

Warranty: Subject to the exclusions, limitations and exceptions, Digimerge warrants to the initial end-user purchaser that this hardware product is free from manufacturing defects in material and workmanship under normal use for a period of three (3) years from the documented date of purchase. Digimerge warrants the security certified Seagate SV35 Series Hard Disc Drive (HDD) for a period of (5) years from the documented date of purchase.

DVR Warranty Details:
The three (3) year warranty period consists of:

- One (1) year over-the-counter replacement warranty covering parts and labor
- Two (2) additional years of repair depot warranty covering parts and labor with proof of RA issued by Digimerge tech support

Exceptions to the above warranty are:

- DVR components including, but not limited to, moving parts, motors, fans, removable flash memory. These are warranted for a one (1) year period.
- Data loss – end users are recommended to back up the content of the hard drive on a regular basis.
- Data recovery, consequential damages, incidental damages and costs related to removal and installation of the hard drive are not covered under this warranty and are not part of the repair or exchange process.

Software & Consumables: All software, accompanying documentation and consumables (including but not limited to fuses and batteries) provided with or as part of the product are furnished AS IS, and are excluded from warranty coverage. Digimerge is not obligated to provide the end-user with a substitute product during the warranty period or at any time.

NOTE: Products are subject to continuous improvement. DIGIMERGE Technologies Inc. and its subsidiaries reserve the right to modify product design, specifications and prices, without notice and without incurring any obligation. Software and firmware are subject to updates from time to time.

For valid warranty claims made during the warranty period, upon proper **proof of purchase** (which is defined as a "valid form of a bill of sale or receipt from an authorized retailer or distributor showing the original date of purchase"), defective products will, at the sole discretion of Digimerge, be repaired or replaced with equal or better product in terms of hardware features without charge if all the conditions set forth in this warranty are met. Any products repaired or replaced within the warranty period, shall be warranted by Digimerge to the initial end-user purchaser for 90 days from the return shipment date, or the remainder of the warranty term, whichever is longer. Repairs are warranted for 90 days outside the original warranty period. Products and parts, at Digimerge's sole discretion, may be replaced with new or refurbished items, and the products and parts replaced become the property of Digimerge. Product returned to Digimerge must be properly packaged in its original packaging (or packaging providing the product with protection equivalent to the original packaging) and sent, with the postage charges prepaid via a shipping method that provides for tracking of your package, to the address provided at the time the Return Authorization was requested. The customer is responsible for all shipping costs associated with the return of the defective products for warranty service to Digimerge warranty/repair depot facilities. Products will be returned to the end-user freight prepaid. Digimerge reserves the right to replace the original hard drive with an equivalent one.

Exclusions and Limitations: Any of the following will void this warranty:

1. Installation or use of the product other than strictly in accordance with the instructions contained in the product's instruction manual;
2. If the product is subjected to operating conditions (including atmospheric, moisture and humidity conditions) outside of the acceptable conditions specified in the product's instruction manual;
3. If the product is subjected to misuse (not adhering to instructions supplied with the product), negligence, modification (of hardware, firmware or software) or abuse;
4. If the product is subjected to electrical short circuits or transients, accident, fire, flood or Acts of God;
5. Adjustment, maintenance or repair of the product other than in accordance with Digimerge approved procedures; and
6. Use of replacement parts other than those specified by Digimerge.
7. If the products original identification (trademark, serial number, model number) markings have been removed, defaced or altered.

DIGIMERGE MAKES NO CLAIMS OR WARRANTIES OF ANY KIND WHATSOEVER REGARDING THE PRODUCT'S ABILITY OR EFFECTIVENESS IN PREVENTING OR REDUCING THE RISK OF, OR DAMAGES RESULTING FROM, LOSS OR THEFT OF PROPERTY OR PERSONAL INJURY. THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS LIMITED WARRANTY IS THE EXCLUSIVE REMEDY OF THE PURCHASER. DIGIMERGE SHALL IN NO EVENT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, PUNITIVE, OR CONSEQUENTIAL DAMAGES OF ANY KIND OR CHARACTER, INCLUDING, WITHOUT LIMITATION, PERSONAL INJURY, LOSS OF REVENUE OR PROFITS, FAILURE TO REALIZE SAVINGS OR OTHER BENEFITS, OR CLAIMS AGAINST THE PURCHASER BY ANY THIRD PERSON, EVEN IF DIGIMERGE HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

No claims or statements regarding the product, whether written or verbal, by salespeople, retailers, dealers or distributors, that are not contained in this limited warranty or in the owner's manual are authorized by Digimerge and do not modify or expand this warranty. Some countries, states, or provinces do not allow the exclusion or limitation of implied warranties or the limitation of incidental or consequential damages for certain products supplied to consumers or the limitation of liability for personal injury. To the extent that such restrictions on limitations apply to the products, the above limitations and exclusions may be limited in their application. In that case, when the implied warranties are not allowed to be excluded in their entirety, they will be limited to the duration of the applicable written warranty, and if damages may not be limited then the above limitations on damages apply, but only to the greatest extent permitted by local law.

Warranty and Non-Warranty Service:

Warranty service can be received by contacting your Digimerge dealer (during the warranty period). The dealer is required to first contact Digimerge Technical Support for assistance. In the event the problem cannot be resolved over the phone or via email, Digimerge will advise to return the product, at customer's expense, for repair or replacement. Upon receipt of the defective product, Digimerge will send a repaired or replacement product at Digimerge's expense to the customer. Dealer should send product to:

In United States:

Digimerge Returns
C/O Russell A. Farrow
15 Lawrence Bell Drive
Amherst, NY
14221

In Canada:

Digimerge Technologies Inc.,
Attention: Repair Department,
300 Alden Rd,
Markham, Ontario, Canada,
L3R 4C1

Out of warranty service: Please visit our web site (www.digimerge.com) for the name and location of the Digimerge authorized service centers.

IT'S ALL ON THE WEB!

- Product Information
- Specification Sheets
- User Manuals
- Software Upgrades
- Quick Start Guides
- Firmware Upgrades



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